DORSET RESEARCH CENTRE

STUDY LAKES:

SAMPLING METHODOLOGY

(1986 - 1989)

AND

LAKE MORPHOMETRY

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PREFACE

The Data Report Series is intended as a readily available source of basic data collected for lakes and watersheds in the Muskoka/Haliburton area of Ontario. These data were collected as part of the Lakeshore Capacity Study and/or the Acid Precipitation in Ontario Study.

The limnological portion of the Lakeshore Capacity Study (1975-81) was initiated to investigate the relationships between lakeshore development and lake trophic status in low ionic strength Precambrian lakes. The Acid Precipitation in Ontario Study (1979-1989) was initiated, in part, to investigate the effects of the deposition of strong acids on aquatic and terrestrial ecosystems in Ontario. The primary findings of these studies have been and will continue to be published as reviewed papers and technical reports.

ABSTRACT

This data report summarizes the water chemistry and zooplankton sampling methods routinely used from 1986-89 by the Limnology Section of the Ontario Ministry of the Environment at the Dorset Research Centre. Maps of the study area and each lake or basin and its morphometry are presented.

Girard, R. and R.A. Reid. 1990. Dorset Research Centre Study Lakes: Sampling Methodology (1986-1989) and Lake Morphometry. Ont. Min. Envir. Data Report DR 90/4.

RÉSUMÉ

Le présent rapport résume les méthodes utilisées de 1986 à 1989 par la Section de limnologie au Centre de recherches de Dorset pour échantillonner la chimie aquatique et le zooplancton. On présente aussi des cartes de la région d'étude et de la morphométrie de chaque lac ou bassin étudié.

TABLE OF CONTENTS

	Page
PREFACE	i
ABSTRACT	ii
LIST OF TABLES	v
INTRODUCTION	1
METHODS	1
Sampling Strategy	1
1. Lake Bathymetry	9
2. Lake and Station Location	13
Biological Sampling Methods	17
1. Light, Phytoplankton, Chlorophyll	17
2. Zooplankton (1980-1989)	17
- Sample Enumeration	19
REFERENCES	25
MORPHOMETRY REFERENCES	31
Appendix 1. Morphometry and Maps	
i) Lake Morphometry and Maps	
ii) Station Morphometry for Multiple Basin Study Lakes	

LIST OF TABLES

		Page
Table 1.	Summary of study lakes: sampling period and frequency	3
Table 2a	Chemical parameter test groups for routine sampling programmes.	6
Table 2b	Parameter codes.	7
Table 3.	Study lakes: chemical test groups.	8
Table 4.	Summary of morphometric data for the study lakes.	10
Table 5.	Summary of morphometric data for the multiple basin study lakes.	12
Table 6.	Lake location, relevant topographic map sheets, and quaternary water shed designation.	14
Table 7.	Station location, relevant topographic map sheets, and quaternary water shed designation.	16
Table 8.	Number of crustacean zooplankton samples collected each year in the study lakes.	20
Table 9.	Lengths of vertical hauls combined to form composite zooplankton samples in the Dorset Lakes after May 1978. Numbr of hauls per sample varies from 1 to 7.	22
Table 10.	Summary of parameters (a and b in $W=aL^b$) of length-weight regression equations used to estimate individual zooplankter dry weight (W in μg) from body length[1] (L in mm).	24

INTRODUCTION

This report describes the chemical and biological sample collection methods from 1986 to 1989 for the Dorset Research Centre study lakes. Previous methodology reports include Data Report DR 83/1 (Scheider et al. 1983) and Data Report DR 86/4 (Locke and Scott 1986). All of the morphometric data developed throughout the studies by the Limnology Unit at the Dorset Research Centre 1976-1989 are provided (Appendix 1).

METHODS

Sampling Strategy

The calibrated watershed lakes ("A" lakes in Table 1) were monitored weekly during the ice-free period from 1976 to 1982 and bi-weekly from 1982 to 1985. Of the "A" lakes, Harp, Heney, Crosson, and Plastic Lake were monitored bi-weekly from 1986 to 1989, while monitoring of Red Chalk East, Red Chalk Main, Blue Chalk, Chub and Dickie lakes was reduced to monthly from 1986 to 1989. All "A" lakes were sampled monthly during the ice cover period from 1986 to 1989.

The "B" and "C" lakes (Table 1) were sampled monthly during the ice-free period (1986-89).

The four Sudbury lakes (Table 1) were sampled monthly (1980-1989) with the exception of bi-monthly samples under ice cover (1980-83).

From 1981 to 1985, twelve Algonquin-Haliburton lakes (Table 1) were sampled as part of a joint MOE/MNR project (Reid et al. 1984, Reid et al. 1987). These lakes were sampled monthly during the ice-free season.

In 1986, a study of a group of 13 lakes that were sensitive to acidic deposition was initiated. Monthly samples were taken year-round distributed throughout the Districts of Parry Sound and Nipissing and Haliburton County (Girard et al. 1990). Monthly sampling of Clear, Delano and Westward Lakes from the Algonquin set continued (1981-1989) and Pearceley, Little Whetstone, and Windfall lakes were added to the set in 1988 and 1989.

The Muskoka Lakes Project (Reid 1988) includes Lake Muskoka, Lake Joseph, Lake Rosseau, and Lake of Bays. It included a bi-weekly sample programme on Gravenhurst and Muskoka Bays 1986-1988 (Reid et al. 1988) and monthly samples throughout 1989. Cliff Bay (Lake Muskoka) was sampled from 1987 to 1989.

The chemical parameters measured in these studies are summarized in Tables 2a, 2b and 3.

Table 1. Summary of study lakes: sampling period and frequency.

Group Designation	Lake	Study Period	Ice free Season Sampling Frequency[1]
A	Blue Chalk	1976 - 1989	a (b: 1986 - 1989)
	Chub	1976 - 1989	a (b: 1986 - 1989)
	Crosson	1979 - 1989	a
	Dickie	1976 - 1989	a (b: 1986 - 1989)
	Harp	1976 - 1989	a
	Heney	1979 - 1989	a
	Jerry	1976 - 1980	a
	Plastic	1979 - 1989	a
	Red Chalk - Main Basin	1976 - 1989	a (b: 1986 - 1989)
	Red Chalk - East Basin	1977 - Spring Overturn 1980, Spring Overturn 1983 - 1989	a (b: 1986 - 1989)
B	Basshaunt	1976 - 1989	b
	Bigwind	1976 - 1989	b
	Buck	1976 - 1989	b
	Crosson	1976 - 1979	b
	Glen	1976, 1978 - 1989	b
	Gullfeather	1976 - 1989	b
	Little Clear	1976 - 1989	b
	Solitaire	1976 - 1989	b
	Walker	1976 - 1989	b
C	Axe	1979 - 1982	c
	Brandy	1979 - 1989	c
	Cinder	1979 - 1989	c
	Cinder - East Basin	1983 - 1989	c
	Fawn	1976 - 1989	c
	Healey	1979 - 1989	c
	Leech	1979 - 1989	c
	Leonard	1979 - 1989	c
	McKay	1979 - 1989	c
	Moot	1979 - 1989	c
	Poker	1979 - 1989	c
	Poker - East Basin	1979 - 1989	c
	Red Pine	1980 - 1982	c
Sudbury	Clearwater	1973 - 1989	b
	Hannah	1973 - 1989	b
	Lohi	1973 - 1989	b
	Middle	1973 - 1989	b
Algonquin-Haliburton	Big Porcupine	1983 - 1985	b
	Bonnechere	1983 - 1985	b
	Clear	1979 - 1983	c (b: 1983 - 1989)
	Crown	1983 - 1985	b
	Delano	1982 - 1989	b
	Kimball	1983 - 1985	b
	Louisa	1981 - 1985	b
	Nunikani	1983 - 1985	b
	Sherborne	1982 - 1985	b
	Smoke	1981 - 1985	b
	Timberwolf	1982 - 1985	b
	Westward	1981 - 1989	b

(cont'd)

Table 1. (Cont'd)

Designation	Lake	Study Period	Ice free Season Sampling Frequency[1]
Sensitive	Bat	1986 - 1989	b
	Clara	1986 - 1989	b
	Cradle	1986 - 1989	b
	Crystal	1986 - 1989	b
	Drummer	1986 - 1989	b
	Louck's	1986 - 1989	b
	Little Eastend	1986 - 1989	b
	Little Whetstone	1988 - 1989	b
	Maggie	1986 - 1989	b
	Pearceley	1988 - 1989	b
	Pincher	1986 - 1989	b
	Round	1986 - 1989	b
	Shoelace	1986 - 1989	b
	Skidway	1986 - 1989	b
	Sunset	1986 - 1989	b
	Windfall	1988 - 1989	
Lake Muskoka			
IM1	Gravenhurst Bay	1986 - 1989	(a 1986-1988) b 1989
IM2	South Bay	1986, 1988 - 1989	b
IM3	Stephens Bay	1986 - 1989	b
IM4	Birch Is (East)	1986 - 1989	b
IM5	Walker's Point	1986	b
IM6	Pine Needle Point	1986 - 1989	b
IM7	Bala Bay	1986	b
IM8	Dudley Bay	1986 - 1989	b
IM9	North Bay	1986	b
IM10	East Bay	1986	b
IM11	Crown Island	1986	b
IM12	Mirror Lake	1986 - 1989	b
IM13	Muskoka Bay	1986 - 1989	(a 1986-1988) b 1989
IM14	Cliff Bay	1987 - 1989	(a 1987-1988) b 1989
Lake Joseph			
LJ1	Frazer Island	1986 - 1989	b
LJ2	Hamer Bay	1986	b
LJ3	Gordon Bay	1986 - 1989	b
LJ4	Yoho Island	1986	b
LJ5	Little Lake Joseph	1986 - 1989	b
LJ6	Chief's Island	1986 - 1989	b
LJ7	Joseph River	1986 - 1989	b
LJ8	Badgerow Island	1986	b
LJ9	Footes Bay	1986 - 1989	b
LJ10	Black Forest Island	1986	b
LJ11	Cox Bay	1986 - 1989	b

(cont'd)

Table 1. (Cont'd)

Designation	Lake	Study Period	Ice free Season Sampling Frequency[1]
Lake Rosseau			
IR1	Cameron Bay	1986 - 1989	b
IR2	Morgan Bay	1986 - 1989	b
IR3	Wiley's Bay	1986	b
IR4	Skeleton Bay	1986 - 1989	b
IR5	Rest Harbour	1986	b
IR6	Tobin Island	1986	b
IR7	Portage Bay	1986 - 1989	b
IR8	Brackenrig Bay	1986 - 1989	b
IR9	Arthurlie Bay	1986 - 1989	b
IR10	Minette (Ouno Island)	1986 - 1989	b
IR11	Venetia Group	1986	b
IR12	Mutchinbaker Bay	1986	b
Lake of Bays			
IB1	Pancake Bay	1986 - 1989	b
IB2	Trading Bay	1986 - 1989	b
IB3	Rabbit Bay	1986 - 1989	b
IB4	Ten Mile Bay	1986	b
IB5	Bigwin Island	1986	b
IB6	Haystack Bay	1986	b
IB7	Dwight Bay	1986 - 1989	b
IB8	Portage Bay	1986 - 1989	b
IB9	Seagull	1986	b
IB10	Roothog Island	1986	b
IB11	Whitehouse Bay	1986 - 1989	b
IB12	Whiskey Bay	1986 + (870609)	b
IB13	Burnt Islands	1987 - 1989	b

[1] a. (1976-1982) weekly (1982-1989) bi-weekly
b. monthly
c. 6 times/year

Table 2a Chemical parameter test groups for routine sampling programmes.

Test Group Code	Test Group Name	Parameters Included[1]
DL1	Lakes Group 1	NNOTFR, NNHTFR, PPUT1, PPUT2, DIC, pH, ALKT1, ALKT, COND25, NNTKUR,CAUR, MGUR, NAUR, KKUR, FFIDUR, CLIDUR, SS04UR, SI03UR, DOC, FEUT, MNUT, ALKT3, (ALUT 1987 to-date)
		DLI LAKES (HYPOLIMNION PROFILE GROUP)[2]
DL2	Lakes Group 2	CHLRAC, CLHRAT (CHLRBT DELETED AUG. 1986)
DL4	Lakes Group 4	NNOTFR, NNHTFR, PPUT1, PPUT2, DIC, pH, ALKT1, ALKT, COLTR, COND25, NNTKUR, CAUR, MGUR, NAUR, KKUR, FFIDUR, CLIDUR, SS04UR, SI03UR, DOC, ALKT3, FEUT
DALCV	Aluminum Speciation	ALNDCV, ALEXCV
DM2	Metals Group 2	CDUT, CUUT, NIUT, PBUT, ZNUT
DLP	Lake Profiles	DO, DIC, pH
PRIVATIZATION TEST GROUPS (MUSKOKA LAKES PROJECT)[3]		
BKIL1	Beak Consultants Analysis Tests	CAUR, MGUR, NAUR, KKUR, SI03UR, SSO4UR, CLIDUR, COLTR, COND25, DOC, DIC, pH, ALKT, PPUT1, PPUT2, NNTKUR, NNHTFR, NNOTFR, ALKT1
TRILT	Rexdale Lab	FEUT, MNUT, ALUT

[1] Table 2b. Parameter Codes - Routine Dorset Site Requests.
[2] Delete the following parameters - MGUR, -CLIDUR, -CAUR, -NAUR, -KKUR.
[3] Lake profile pH, DIC submitted to Beak Lab, Lake profile DO submitted to Dorset Lab.

Table 2b Parameter codes.

Abbreviation	Description
ALKT	Total fixed end point alkalinity to pH 4.5
ALKT3	Total fixed end point alkalinity to pH 3.8
ALKTI	Total inflection point alkalinity
ALEXCV	Catechol-violet exchanged aluminum
ALNDCV	Catechol-violet aluminum
ALUT	Total aluminum
CAUR	Calcium
CDUT	Total cadmium
CHLRAC	Chlorophyll acid a
CHLRAT	Chlorophyll a
CLIDUR	Chloride
COLTR	True colour
COND25	Conductivity (at 25°C)
CUUT	Total copper
DO	Dissolved oxygen
DOC	Dissolved organic carbon
DIC	Dissolved inorganic carbon
FEUT	Total iron
FFIDUR	Fluoride
KKUR	Potassium
MGUR	Magnesium
MNUT	Manganese
NAUR	Sodium
NIUT	Total nickel
NNHTFR	Ammonium
NNOTFR	Nitrate + Nitrite
NNTKUR	Total Kjeldahl nitrogen
PBUT	Total lead
PH	pH
PPUT1	Total phosphorus
PPUT2	Total phosphorus (duplicate)
SIO3UR	Silicates as SiO_2
SSO4UR	Sulphat as SO_4
ZNUT	Total zinc

Table 3. Study lakes: chemical test groups.

Lake/Station Designation (Table 1)	Parameter Test Group From (Table 2.a, b) or Parameters		Year
A, B, C, Sensitive Lakes[1]	DL1	stratified or whole lake sample[2]	1986 - 1989
	DL2	euphotic zone or 0-6 m[3]	1986 - 1989
	DLP	ever 2m from 1m to Zmax[4]	1986 - 1989
Chub Lake	DL1	hypolimnetic profile[5]	1986 - 1989
Plastic Lake	DL1	hypolimnetic profile	1986 - 1989
Sudbury	DL1, DM2	whole lake samples	1986 - 1989
	DL2	euphotic zone or 0-6m	1986 - 1989
	DALCV	whole lake samples	1985 - 1989
Inland Lakes			
All Inland Lakes Stations[6]	DL4	stratified or whole lake samples	1986 - 1989
	DL2	euphotic zone or 0-6 m	1986 - 1989
	BKIL1, TRILT, (ALKT3+FFIDUR)[7]	stratified or whole lake samples	1989
	DO[8]	4 depths in the hypolimnion	1986
Exceptions:			
Lake of Bays			
IB1-IB12	DL1, DL2		1986 - 1988
IB13	DL1, DL2		1987 - 1989
IB1-IB13	BKIL1, TRILT, (ALKT3+FFIDUR)		1989
	DO		1986
IB1	DLP[9]		1986 - 1989
Lake Muskoka			
IM1, IM13, IM14	DL1, DL2		1986 - 1988
	BKIL1, TRILT, (ALKT3 & FFIDUR)		1989
	DO		1986
	DLP		1986 - 1989

[1] Lake location - Table 6.
[2] Stratified samples during thermal stratification and whole lake during the non-stratified season.
[3] Euphotic zone (2x Secchi) samples during the ice-free season and 0-6 m samples during the ice covered season.
[4] Dissolved oxygen in the "A" lakes at every meter in the hypolimnion (BC-14m, CN-16m, DE-8m, HP-16m, HY-2m, PC-10m, RCE-14m, RCM-26m, CB-16m).
[5] Hypolimnion sampled every 2m for DL1 with the parameter exceptions noted in Table 3.
[6] All stations include (a) Lake Muskoka (except IM1, IM13, IM14); (b) Lake Rosseau (IR1-IR12); (c) Lake Joseph (IJ1-IJ11).
[7] BKIL1, TRILT analyzed by Beak Consultants and ALKT3 & FFIDUR analyzed in the Dorset Lab.
[8] DO sampled every 2m intervals at IM6, IM8, IJ5, IJ8, IJ11, IR1, IR4 from 1987 - 1989.
[9] DO analyzed at the Dorset Lab and pH and DIC are analyzed by Beak Consultants in 1989.

The various profile sampling protocols within specified study lakes (Table 3) include dissolved oxygen (DO), pH and dissolved inorganic carbon (DIC) and odd metre interval hypolimnion chemistry. Profile sets of DO, pH and DIC are sampled from every odd metre depth from 1 m to the maximum depth. For each of the "A" lakes, DO profile samples were collected at even metres throughout the hypolimnion. The study in Chub Lake (1986-89) and in Plastic (1989) sampled the hypolimnion at odd metre intervals for water chemistry (Table 2 - Hypolimnion Profile Group).

The quality control/quality assurance programme for the Lakeshore Capacity Study and the Acid Precipitation in Ontario Study is reported in Locke (1986), Locke (1990).

1. Lake Bathymetry

Morphometric data are summarized for all study lakes in Table 4, and sub-basins of multiple basin study lakes in Table 5. Bathymetric maps and morphometric data are presented in Appendix 1. The morphometry and catchment areas for the calibrated watersheds ("A" Lakes, Table 1) were revised in Data Report DR 87/4 from those previously reported in Data Reports DR 83/1, DR 83/3, and DR 85/1. Bathymetric maps were drawn at 2m contour intervals from sonar transects taken with a Furuno Mark III echo-sounder (Locke 1985). From 1986 to 1989, a Lowrance X16 computer sonar equipment with an 8 degree cone transducer was used. Morphometric parameters were calculated using Hutchinson (1957).

Table 4. Summary of morphometric data for the study lakes.

Lake	Area (ha)	Mean Depth (m)	Maximum Depth (m)	Volume ($m^3 x 10^5$)
Axe[1]	264.	2.5	15.0	66.22
Basshaunt[1]	47.3	7.7	24	36.6
Bat	2.3	2.9	8.3	0.69
Big Porcupine[1]	235	7.5	30.5	177.3
Bigwind[1]	111	10.7	32	118
Blue Chalk[2]	52.4	8.5	23	44.68
Bonnechere[1]	105	6.4	21.4	67.0
Brandy[1]	108	3.5	7.5	37.7
Buck	40.3	10.9	30	43.9
Chub[2]	34.4	8.9	27	30.42
Cinder - East Basin	50.1	10.1	36.5	50.7
Cinder - West Basin	26.9	4.8	16.0	12.82
Clara	30.2	4.6	11.0	13.92
Clear[2]	88.4	12.4	33.0	109.1
Clearwater	76.5	8.3	21.5	64.2
Cradle	17.9	12.4	33.3	22.25
Crosson[2]	56.7	9.2	25	52.16
Crown[1]	136	8.0	30.0	108.4
Crystal	41.0	4.3	17.1	17.77
Delano	23.9	7.1	18.6	17.0
Dickie[2]	93.6	5.0	12	46.65
Drummer	24.2	3.6	10.2	8.75
Fawn[1]	85.8	3.5	7.9	30.2
Glen	16.3	7.2	15	11.8
Gullfeather	65.9	4.8	13	31.5
Hamer	35.2	3.3	8.5	11.63
Hannah	27.3	4.0	8.5	10.8
Harp[2]	71.4	13.3	27.5	95.07
Healey[1]	122	2.8	7.0	33.7
Heney[2]	21.4	3.3	5.8	7.05
Jerry	50.1	12.4	35.	61.9
Joe	179.6	11.2	34.	201.0
Kimball[1]	213	22.0	61.0	464
Labelle	6.2	3.8	10.2	2.36
Leech[1]	82.0	6.3	13.7	51.9
Leonard[1]	195	6.9	15.2	134
Little Clear	10.9	8.1	25	8.86
Little Eastend	11.7	6.0	15.5	7.05
Little Whetstone	10.6	3.6	13.6	3.73
Lohi	40.5	6.2	19.5	25.0
Louck's	20.8	2.3	8.2	4.74
Louisa[1]	513	16.1	61.0	856
Maggie	138.6	10.2	31.0	141.0
McKay	122	5.2	19.5	63.5
Middle	28.2	6.2	15.0	17.5
Moot[1]	46.2	2.7	7.9	12.4
Mountaintop	4.9	4.3	9.5	2.11
Nelson	309.0	11.6	51.	359.0
Nunikani[1]	116	7.9	24.0	91.7
Pearceley	44.1	4.7	8.1	20.82
Peninsula[1]	822.9	9.9	34.1	818.3
Pincher	42.1	6.1	15.5	25.48
Plastic[2]	32.1	7.9	16.3	25.24

(cont'd)

Table 4. (Cont'd)

Lake	Area (ha)	Mean Depth (m)	Maximum Depth (m)	Volume ($m^3 x 10^3$)
Poker - East Basin	5.4	6.9	20.5	3.72
Poker - West Basin	15.3	6.3	17.5	9.61
Red Chalk - East Basin[2]	13.1	5.7	19	7.48
Red Chalk - Main Basin[2]	44.1	16.7	38	73.52
Red Pine[1]	365.	10.1	38.7	367.
Round[1]	226.0	4.4	11.6	99.1
Sherborne[1]	252	9.6	35.1	241
Shoelace	7.2	4.5	12.0	3.23
Skidway	18.5	2.9	7.8	5.35
Smoke[1]	679	16.2	55.0	1099
Solitaire	124	13.3	31	164
Sunset	12.9	1.8	6.5	2.36
Swan	5.8	2.8	8.8	1.62
Timberwolf[1]	167	7.4	20.4	124
Vernon[1]	1454.	13.2	36.6	1912.
Walker	68.2	6.2	17	42.1
Westword[1]	63.3	20.5	44.4	129
Windfall	25.7	4.4	13.8	11.16
Young	105.9	12.0	21.1	127.4

[1] Data from the Ministry of Natural Resources Aquatic Inventory and Habitat Classification (converted to metric).
[2] Schindler, D.W. and Nighswander. 1970.
[3] Revision from Data Report DR 87/4 (Reid et al. 1987).

Table 5. Summary of morphometric data for the multiple basin study lakes.

Station	Name	Area (ha)	Mean Depth (m)	Maximum Depth (m)	Volume (m^3x10^5)
Lake Muskoka					
1	Gravenhurst Bay	179.4	9.8	15.2	175.0
2	South Bay	507.5	8.4	18.3	427.7
3	Stephens Bay	75.2	7.3	18.3	54.9
4	Birch Is (East)	782.2	6.3	15.9	490.3
5	Walker's Pt	2083.	19.0	52.4	3957.
6	Pine Needle Pt	128.3	4.9	11.3	63.3
7	Bala Bay	611.4	9.5	37.2	579.1
8	Dudley Bay	362.2	7.6	18.3	276.4
9	North Bay	1134.0	10.7	28.7	1210.
10	East Bay	741.4	17.5	41.8	1295.
11	Crown Is	2096.	24.7	67.1	5174.
12	Mirror Lake	52.5	2.7	5.8	14.1
13	Muskoka Bay	241.2	7.1	13.5	170.9
14	Cliff Bay	(Inclusive of Muskoka Bay)			
Lake Joseph					
1	Frazer Is	78.2	10.0	29.0	78.5
2	Hamer Bay	119.0	17.3	46.9	205.6
3	Gordon Bay	102.5	12.0	35.1	122.7
4	Yoho Is	1791.	35.7	82.9	6399.
5	Little Lake Joseph	304.1	15.5	38.7	470.8
6	Chief's Is	245.1	8.5	18.9	209.4
7	Joseph R	77.2	3.3	7.6	25.1
8	Badgerow Is	526.4	16.7	37.5	878.7
9	Footes Bay	250.8	15.7	36.6	394.7
10	Black Forest Is	438.0	10.8	26.2	474.5
11	Cox Bay	190.1	6.8	14.0	129.9
Lake Rosseau					
1	Cameron Bay	95.7	6.9	13.4	66.0
2	Morgan Bay	265.2	11.3	29.6	300.1
3	Wiley's Bay	37.6	9.6	18.3	35.9
4	Skeleton Bay	177.8	9.6	20.1	170.5
5	Rest Harbour	140.9	11.0	22.3	155.1
6	Tobin Is	1281.	16.1	35.1	2064.
7	Portage Bay	149.7	6.5	12.8	98.0
8	Brackenrig Bay	43.8	1.9	4.3	8.2
9	Arthurlie Bay	11.2	4.8	7.3	53.5
10	Minette (Ouno Is)	126.4	6.5	15.5	81.7
11	Venetia Group	1225.	22.8	46.6	2792.
12	Mutchinbaker Bay	1809.	37.2	90.2	6731.
Lake of Bays					
1	Pancake Bay	69.9	4.5	13.4	31.8
2	Trading Bay	425.7	18.7	47.2	797.2
3	Rabbit Bay	72.5	10.6	22.9	77.1
4	Ten Mile Bay	779.3	13.3	41.2	1039.
5	Bigwin Is	652.6	17.7	56.4	1155.
6	Haystack Bay	245.0	12.5	40.8	306.8
7	Dwight Bay	649.6	22.3	53.3	1447.
8	Portage Bay	173.6	14.5	47.2	252.2
9	Seagull Rk	902.7	28.2	57.9	2543.
10	Roothog Is	1675.	26.4	79.3	4428.
11	Whitehouse Bay	402.7	19.0	47.2	764.5
12	Whiskey Bay	812.2	26.6	68.0	2162.
13	Burnt Is	(Inclusive of Whiskey Bay)			

2. Lake and Station Location

The station abbreviation, latitude, longitude, topographic map number at scale of 1:50,000 and the Ontario Watershed Unit (Cox, E.T., 1976) for each lake is summarized in Table 6. For the multiple basin study lakes station location descriptions were obtained from navigation charts (Table 7).

The procedures used by the Limnology Section of the Dorset Research Centre for submission of samples through the Lab Information System (LIS) are described in detail in McCormick (1988). The station identification numbers for each station are presented in Nicolls (1986) and McCormick, Manual Supplement (1988).

Table 6. Lake location, relevant topographic map sheets, and quaternary watershed designation.

Lake Name	Abbreviation	Latitude	Longitude	Topographic Map[1]	Ontario Watershed Unit[2]
Axe	AX	45° 23'	79° 30'	31E5, 6	2EB13
Basshaunt	BH	45° 07'	78° 28'	31E1	2IIF10
Bat	S1	45° 35'	78° 31'	31E10	2KD20
Big Porcupine	BP	45° 27'	78° 37'	31E7	2EB11
Bigwind	BW	45° 03'	79° 03'	31E3	2EB9
Blue Chalk	BC	45° 12'	78° 56'	31E2	2EC15
Bonnechere	BO	45° 28'	78° 35'	31E7	2KD1
Brandy	BY	45° 06'	79° 31'	31E4	2EB4
Buck	BK	45° 23'	79° 00'	31E7	2EB10
Chub	CB	45° 13'	78° 59'	31E2	2EB9
Cinder	CI/CIE	45° 04'	78° 56'	31E2	2EC15
Clara	S4	45° 33'	78° 52'	31E10	2EB13
Clear	CL	45° 11'	78° 43'	31E2	2HF8
Clearwater	CR	46° 22'	81° 03'	41E6	2CF5
Cradle	S2	45° 28'	78° 35'	31E7	2KD18
Crosson	CN	45° 05'	79° 02'	31E3	2EC15
Crown	CW	45° 26'	78° 40'	31E7	2EB11
Crystal	S3	45° 23'	78° 29'	31E8	2KD18
Delano	DO	45° 31'	78° 36'	31E10	2KD1
Dickie	DE	45° 09'	79° 05'	31E3	2EB9
Drummer	S5	45° 32'	78° 45'	31E10	2EB11
Fawn	FN	45° 10'	79° 15'	31E3	2EB13
Glen	GN	45° 08'	78° 30'	31E1	2HF10
Gullfeather	GF	45° 06'	79° 01'	31E3	2EC15
Hamer	HR	45° 14'	79° 48'	31E4	2EB5
Hannah	HH	46° 21'	81° 02'	41I6	2CF8
Harp	HP	45° 23'	79° 07'	31E6	2EB13
Healey	HE	45° 05'	79° 11'	31E3	2EB9
Heney	HY	45° 08'	79° 06'	31E3	2EB9
Jerry	JY	45° 23'	79° 06'	31E6	2EB13
Joe	JO	46° 44'	81° 01'	41I11	2CF14
Kimball	KL	45° 21'	78° 41'	31E7	2EB12
Labelle	LE	46° 42'	81° 07'	41I14	2CF13
Leech	LH	45° 03'	79° 06'	31E3	2EB9
Leonard	LD	45° 04'	79° 27'	31E3	2EB4
Little Clear	LC	45° 24'	79° 00'	31E6	2EB10
Little Eastend	S6	45° 34'	78° 57'	31E10	2EB13
Little Whetstone	S16	45° 42'	79° 08'	31E11	2EA22
Lohi	L1	46° 23'	81° 02'	41I6	2CF5
Louck's	S8	45° 12'	79° 48'	31E4	2EB5
Louisa	LA	45° 28'	78° 29'	31E7,8	2KD19
Maggie	S7	45° 30'	78° 52'	31E7,10	2EB13
McKay	MY	45° 03'	79° 10'	31E3	2EB9
Middle	ME	46° 26'	81° 02'	31E6	2CF8

(cont'd)

Table 6. (Cont'd)

Lake Name	Abbreviation	Latitude	Longitude	Topographic Map[1]	Ontario Watershed Unit[2]
Moot	MO	45° 09'	79° 10'	31E3	2EB9
Mountaintop	MT	46° 55'	80° 53'	41I14	2DA4
Nelson	NEM/NENW	46° 44'	81° 05'	41I14	2CF13
Nunikani	NI	45° 12'	78° 44'	31E2	2HF8
Pearceley	S15	45° 42'	79° 30'	31E11,12	2EA20
Peninsula	H3	45° 20'	79° 06'	31E6	2EB13
Pincher	S9	45° 34'	78° 51'	31E10	2EB13
Plastic	PC	45° 11'	78° 50'	31E2	2HF10
Poker	PR/PRE	45° 03'	78° 56'	31E2	2EC15
Red Chalk	RCM/RCE	45° 11'	78° 56'	31E2	2EC15
Red Pine	RP	45° 12'	78° 42'	31E2	2HF8
Round	S10	45° 31'	80° 08'	41E9	2EA14
Sherborne	SH	45° 11'	78° 47'	31E2	2HF8
Shoelace	S11	45° 13'	78° 45'	31E2	2HF8
Skidway	S12	45° 12'	79° 52'	31E4	2EB2
Smoke	SM	45° 31'	78° 41'	31E7,10	2EB11
Solitaire	SE	45° 22'	79° 00'	31E6	2EB10
Sunset	S13	45° 34'	78° 56'	31E10	2EB13
Swan	SW	46° 22'	81° 04'	41I7	2CF5
Timberwolf	TF	45° 41'	78° 48'	31E6	2KD13
Vernon	H4	45° 20'	79° 17'	31E7	2EB13
Walker	WR	45° 24'	79° 05'	31E14	2EB13
Westward	WD	45° 29'	78° 45'	31E4	2EB11
Windfall	S14	45° 45'	79° 06'	31E	2EA21
Young	YG	45° 13'	79° 33'	31E	2EB7

[1] Energy, Mines and Resources Canada, Scale: 1:50,000.
[2] Cox, E.T. 1976. Counts and Measurements of Ontario Lakes.

Table 7. Station location, relevant topographic map sheets, and quaternary watershed designation.

	Abbreviation	Latitude	Longitude	Topographic Map[1]	Ontario Watershed Unit[2]
Lake Muskoka	IM1	44°55.7'	79°24.0'	31D14	2EB4
	IM2	44°57.9'	79°23.4'	31D14	
	IM3	45°00.4'	79°22.0'	31E3	
	IM4	45°02.4'	79°24.8'	31E3	
	IM5	45°02.4'	79°27.4'	31E3	
	IM6	45°00.1'	79°29.0'	31D14	
	IM7	45°00.5'	79°36.2'	31E4	
	IM8	45°02.3'	79°36.6'	31E4	
	IM9	45°04.1'	79°35.7'	31E4	
	IM10	45°01.3'	79°31.7'	31E4	
	IM11	45°04.4'	79°30.8'	31E4	
	IM12	45°06.4'	79°34.3'	31E4	
	IM13	44°56.7'	79°24.3'	31D14	
	IM14	44°56.7'	79°23.9'	31D14	
Lake Joseph	IJ1	45°15.5'	79°43.4'	31E4	2EB5
	IJ2	45°13.3'	79°46.3'	31E4	
	IJ3	45°12.4'	79°47.3'	31E4	
	IJ4	45°10.8'	79°44.2'	31E4	
	IJ5	45°12.3'	79°41.1'	31E4	
	IJ6	45°10.3'	79°41.9'	31E4	
	IJ7	45°09.0'	79°31.6'	31E4	
	IJ8	45°09.0'	79°42.8'	31E4	
	IJ9	45°08.3'	79°43.8'	31E4	
	IJ10	45°07.7'	79°40.7'	31E4	
	IJ11	45°06.5'	79°37.3'	31E4	
Lake Rosseau	IR1	45°14.9'	79°38.7'	31E4	2EB5
	IR2	45°13.7'	79°39.8'	31E4	
	IR3	45°36.4'	79°37.4'	31E4	
	IR4	45°12.5'	79°34.2'	31E4	
	IR5	45°11.6'	79°36.4'	31E4	
	IR6	45°08.6'	79°33.2'	31E4	
	IR7	45°09.3'	79°31.6'	31E4	
	IR8	45°07.1'	79°31.6'	31E4	
	IR9	45°06.9'	79°32.9'	31E4	
	IR10	45°09.6'	79°38.6'	31E4	
	IR11	45°09.2'	79°36.6'	31E4	
	IR12	45°13.5'	79°36.9'	31E4	
Lake of Bays	IB1	45°15.0'	78°53.0'	31E2	2EB10
	IB2	45°14.5'	78°54.0'	31E2	
	IB3	45°15.5'	78°54.6'	31E7	
	IB4	45°17.4'	78°58.4'	31E7	
	IB5	45°15.3'	79°01.0'	31E6	
	IB6	45°17.4'	79°01.5'	31E6	
	IB7	45°19.5'	79°00.9'	31E6	
	IB8	45°18.7'	79°04.2'	31E6	
	IB9	45°16.5'	79°03.9'	31E6	
	IB10	45°13.3'	79°03.6'	31E3	
	IB11	45°13.6'	79°05.7'	31E3	
	IB12	45°12.5'	79°06.0'	31E3	
	IB13	45°11.0'	79°06.0'	31E3	

[1] Energy, Mines and Resources Canada, Scale 1:50,000.
[2] Cox, E.T. 1976. Counts and Measurements of Ontario Lakes.
[3] Notices to Mariners scaled to 0.1 minute to 125. metres.

Biological Sampling Methods

1. Light, Phytoplankton, Chlorophyll

The methods employed to measure and sample the euphotic zone between 1976 and 1985 are described in detail in Data Report DR 86/4 (Locke and Scott 1986).

The measuring of photosynthetically active radiation (PAR) was discontinued at the end of the ice-free period of 1985. From the 1984 ice-free season, to the present date, the euphotic zone was estimated as twice the Secchi disc depth. During the ice cover period the euphotic zone has continued to be uniformly estimated as the upper 6 m in all study lakes.

The parameter CHLRBT (chlorophyll b) has been deleted from "requests for analysis" from August 1986 to 1989 in all study lakes.

2. Zooplankton (1980-1989)

Zooplankton were collected during the ice free season with frequencies indicated in Table 8. From 1978 to 1980, Clarke-Bumpus (C/B) sample volumes were calculated using a conversion factor of 5.6 L of lake water filtered per metre revolution. This figure was supplied by Dr. C. Bil of the National Water Reserach Institute in Burlington, Ontario after calibrating the C/B sampler (Locke and Scott, 1986). From 1981 to 1989 sample volumes were determined from meter revolutions of the

collection and calibration (with no net) hauls as described by Locke and Scott (1986).

The primary goal of the zooplankton sampling program at Dorset is to describe long-term changes in zooplankton composition and biomass. For this purpose, the contribution of the horizontal component of variability may be ignored (Yan 1986). Gear and counting protocol must be invariate, and temporal and vertical sources of variance must be incorporated into the sampling design.

Yan and Stokes (1989) showed that adequate averages of zooplankton biomass and species richness of Dorset lakes could be determined from samples collected on a monthly basis during the ice free season. Hence samples are routinely collected on a monthly basis in most lakes, and on a biweekly basis in special interest lakes (Harp, Heney, Crosson and Plastic). To allow for the vertical variation in zooplankton composition and for the diminution of stratum volume with lake depths, composite samples were formed by combining the contents of a series (generally 4 to 7) of vertical net hauls. Haul lengths were determined to minimize the deviation of the cumulative fraction of the total haul lengths from the fraction of the total volume that were between metre deep increments of depth. In other words, a composite sample was formed that corrected for the diminution of lake volume with depth.

The tow net haul lengths for Heney Lake were revised from 4, 4, 4 to 5, 4, 2, 2 in 1987 following the refinement of a computer optimizing programme which addressed the diminution of stratum volume with lake depth.

Sample Enumeration

Zooplankton were routinely identified and enumerated by Dr. W. Geiling. Therefore, the data were not influenced by changes in the taxonomic skills of the sample enumerators. Edmundson (1959) was the basic taxonomic reference. However, Dr. Geiling followed Brooks (1957) as modified by Dobson (1981) for Daphnia spp., Korinek (1981) for Diaphanosoma spp., and Deevey and Deevey (1971) for Eubosmina. Immature copepods were routinely identified to the level of suborder, except for Epischura lacustris and Senecella calanoides. Their copepodids were identified to the species level.

A minimum of 250 animals (and rarely more than 300) were enumerated and simultaneously measured (Sprules et al. 1981) in each sample. Subsample volumes were adjusted for the abundance of species so that the most common species rarely formed > 20% of the total count. Individual weights were calculated from measured lengths using length-weight regressions (Table 10).

Table 8. Number of crustacean zooplankton samples collected each year in the study lakes.

Lake	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Blue Chalk	16	20	14	13	13	13	8	7	6	5
Chub	15	21	14	14	14	12	9	8	7	7
Crosson	16	17	15	14	13	14	11	12	13	13
Dickie	16	18	15	13	12	13	7	7	6	8
Harp	13	21	15	12	13	14	11	11	12	12
Heney	15	12	-*	14	12	13	13	19*	12	13
Plastic	16	19	14	14	13	14	12	12	30	13
Red Chalk - Main Basin	17	20	15	12	13	14	8	6	6	5
Red Chalk - East Basin				13	13	13	8	7	6	5
Basshaunt	1	4	5	4	5	6				
Bigwind	2	5	7	5	6	7				
Buck	1	4	6	5	6	6				
Glen	1	5	5	5	5	6				
Gullfeather	2	4	8	5	7	7				
Little Clear	1	4	6	5	6	6				
Solitaire	1	4	7	5	6	6				
Walker	1	3	6	4	6	6				
Axe		4	2							
Brandy		3	3	3	5					
Cinder - West Basin		4		3	5					
Cinder - East Basin					6					
Fawn		4	2	3	4					
Healey		5		3	4					
Leonard		4	3	3	5					
Leech		5		3	4					
Moot		4		3	5					
McKay		4	3	3	5					
Poker - West Basin		4		3	5					
Poker - East Basin					4					
Red Pine		5	3							
Algonquin Lakes										
Big Porcupine				5	7	6				
Bonnechere				5	7	6				
Clear		4	6	5	6	6				7
Crown				7	7	6				
Delano			5	5	7	6				6
Kimball				6	7	6				
Louisa		7	7	5	5	6				
Nunikani				4	7	6				
Sherborne			4	5	7	6				
Smoke		7	7	6	6	6				
Tim			4							
Timberwolf			7	6	7	6				
Westward		7	6	7	7	6				6

(cont'd)

Table 8. (Cont'd)

Lake	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Sudbury Lakes										
Clearwater		6	6	6	8	6	6	6	7	5
Hannah		6	6	5	8	6	6	6	7	5
Lohi		6	6	6	8	6	6	6	7	5
Middle		6	7	6	8	6	6	6	7	5
Swan **		7	10	10	12	12				
Bat								6	6	6
Clara								6	6	6
Clear										7
Cradle								6	6	6
Crystal								6	6	7
Drummer								6	6	5
Little Eastend								6	6	6
Little Whetstone									6	6
Louck's								6	6	7
Maggie								6	6	7
Pearceley									6	6
Pincher								6	6	6
Round								6	6	7
Shoelace								6	6	7
Skidway								6	6	7
Sunset								6	6	6
Windfall									6	6

* Sampled on a bi-weekly basis by Schindler/Patalas (S/P) trap, all others by C/B tow net.

** Samples collected by Bill Keller, MOE, Sudbury.

Table 9. Lengths of vertical hauls combined to form composite zooplankton samples in the Dorset Lakes after May 1978. Number of hauls per sample varies from 1 to 7.

Lake	Length (m) of Individual Hauls						
	1	2	3	4	5	6	7
A Lakes							
Blue Chalk	20	15	9	4	4		
Chub	20	15	9	4	4		
Crosson	19	14	9	4	4		
Dickie	8	6	4	2			
Harp	30	21	13	6	6		
Heney	5	4	2	2			
Plastic	15	11	7	3			
Red Chalk-Main	32	24	16	8			
Red Chalk-East	15	11	7	3			
B Lakes							
Basshaunt	19	14	9	4	4		
Bigwind	25	18	11	5	5		
Buck	20	15	10	5			
Glen	12	9	6	3			
Gullfeather	8	6	4	2			
Little Clear	12	9	6	3			
Solitaire	27	20	13	6	6		
Walker	10	7	4.5	2	2		
C Lakes							
Axe	12						
Brandy	4	4					
Cinder - East	18.5	9.5	5.75	3.75	3	2	
Fawn	6.5	2.75	2				
Healey	5.5	4	3	1.75	1		
Leech	11.5	9.5	6.75	4.75	4	1.5	
Leonard	15	10	5				
Moot	4.75	4	2	1			
McKay	10.5	5.5	3.75	1.5			
Poker - East	15.5	9.5	8.8	3.8	1.5		
- West	11.5	7.5	4.5	1.75			
Red Pine	35						
Algonquin Lakes							
Bonnechere	14.5	10.5	6.5	3.75	3	1	1
Clear	30	22	14	6	6		
Delano	15	13	8	4	4		
Louisa	50	30	16	16	8	8	
Smoke	50	30	16	16	8	8	
Tim	19	13	7	3			
Timberwolf	19	14	9	4	4		
Westward	40	30	20	10			

(cont'd)

Table 9. (Cont'd)

Lake	Length (m) of Individual Hauls						
	1	2	3	4	5	6	7
Algonquin Lakes (cont'd)							
Big Porcupine	19.5	12.5	8.5	5.75	3.75	3	2
Crown	21.75	16.5	15	8.25	6	3	
Kimball	49	35	27	19.5	13.5	7.5	3
Nunikani	17.5	13	9.5	5	4	2	
Sherborne	23	16.5	15	9	6	3.75	3
Sudbury Lakes							
Clearwater	20	13	8	4			
Hannah	7.5	6	4	2			
Lohi	18	10	6	3			
Middle	13	10	6	3			
Sensitive Lakes							
Bat	6.5	3	2				
Clara	10	7	4.5	2	2		
Cradle	30	22	14	6	6		
Crystal	14	7	3	3			
Drummer	8	4.5	2	2			
Little Eastend	11.5	7.5	4.5	1.75			
Little Whetstone	8.5	3.5	2	1			
Louck's	7	6	4	2	2		
Maggie	25	20	12	6	6	6	
Pearceley	8.25	6.5	3.75	1.5			
Pincher	13	10	6	3			
Round	10	7	4.5	2	2		
Shoelace	10	7	4.5	2	2		
Skidway	6.5	3	2	2			
Sunset	4.5	2	1				
Windfall	9.5	4.75	4	2	1.25		

Table 10. Summary of parameters (a and b in $W=aL^b$) of length-weight regression equations used to estimate individual zooplankter dry weight (W in μg) from body length[1] (L in mm).

Taxon	a	b	Source[2]
Cladocera			
Acantholeberis, Acroperus, Alona, Eurycercus, Ilyocryptus, Macrothrix, Ophryoxus, Pleuroxus, Chydorus and Streblocercus spp.	14.08	1.98	1
Bosmina and Eubosmina spp.	17.74	2.23	1
Ceriodaphnia, Daphnia, Latona, Scapholeberis, Sida, and Simocephalus spp.	5.0	2.84	2
Diaphanosoma spp.	5.07	1.05	1
Holopedium gibberum	11.21	3.04	3
Polyphemus pediculus	16.27	2.15	4
Calanoida			
Calanoid nauplius	3.01	1.71	1
Senecella calanoides	7.70	2.33	2
Other Calanoida	5.50	2.46	2
Cyclopoida			
Cyclopoid nauplius	2.60	1.64	1
Cyclops bicuspidatus thomasi	5.67	1.93	1
Other Cyclopoida	5.50	2.46	2

[1] excluding terminal spines and setae
[2] 1 - Culver et al. 1985
2 - Sprules et al. 1984
3 - Calculated from Yan and Mackie 1987
4 - McCauley 1984

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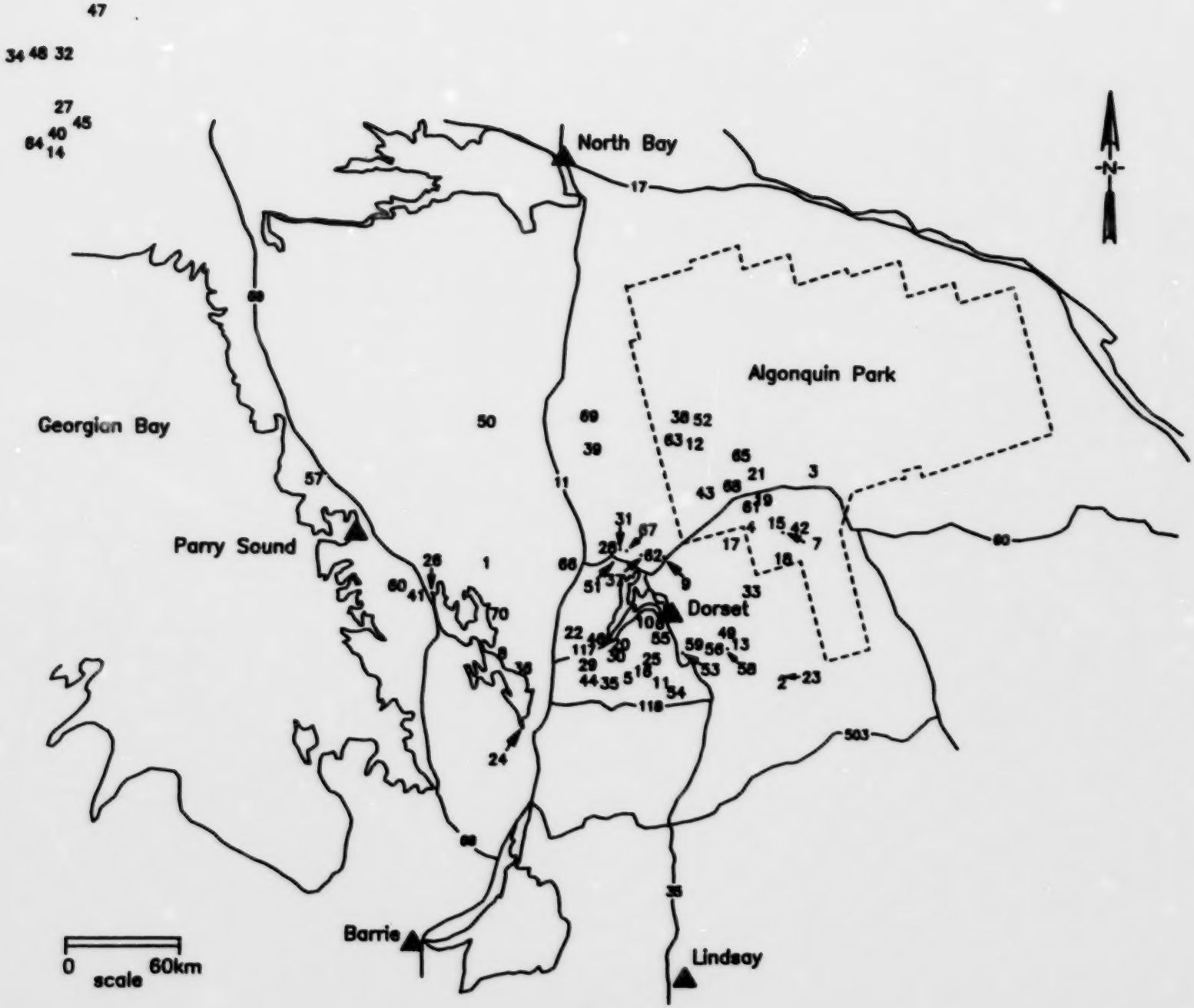
LAKE LEGEND

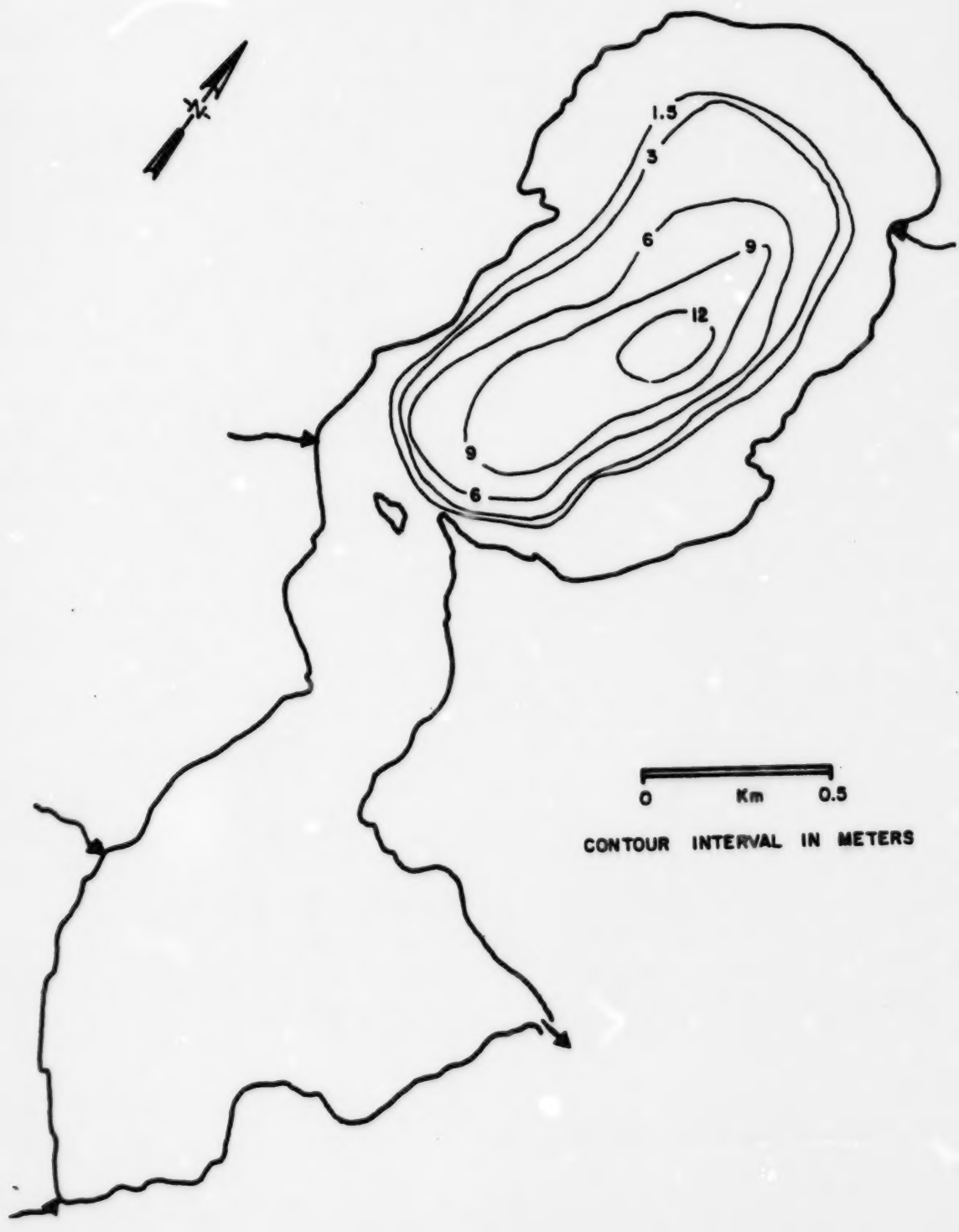
#	Lake
1	Axe
2	Basshaunt
3	Bat
4	Big Porcupine
5	Bigwind
6	Blue Chalk
7	Bonnechere
8	Brandy
9	Buck
10	Chub
11	Cinder East, Main
12	Clara
13	Clear
14	Clearwater
15	Cradle
16	Crosson
17	Crown
18	Crystal
19	Delano
20	Dickie
21	Drummer
22	Fawn
23	Glen
24	Gravenhurst Bay - Muskoka Bay
25	Gullfeather
26	Hamer
27	Hannah
28	Harp
29	Healey
30	Heney
31	Jerry
32	Joe
33	Kimball
34	Labelle
35	Leech
36	Leonard
37	Little Clear
38	Little Eastend
39	Little Whetstone
40	Lohi
41	Louck's
42	Louisa
43	Maggie
44	McKay
45	Middle
46	Moot
47	Mountaintop
48	Nelson #1, #4
49	Nunikani
50	Pearceley
51	Peninsula
52	Pincher
53	Plastic
54	Poker East, West
55	Red Chalk East, Main
56	Red Pine
57	Round
58	Sherborne
59	Shoelace
60	Skidway
61	Smoke
62	Solitaire
63	Sunset
64	Swan
65	Timberwolf
66	Vernon
67	Walker
68	Westward
69	Windfall
70	Young
71	Lake Muskoka
72	Lake Joseph
73	Lake Rosseau
74	Lake of Bays


North Bay
Algonquin Park
Georgian Bay
Parry Sound
Dorset
Barrie
Lindsay
17
69
11
35
118
503
0
scale
60km

AXE LAKE

PARRY SOUND & MUSKOKA Dist.

Lat. 45° 23' Long. 79° 30'



Axe Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V ($m^3 x 10^5$)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
264	66.22	2.51	15.0	10.6	1.83	0.502

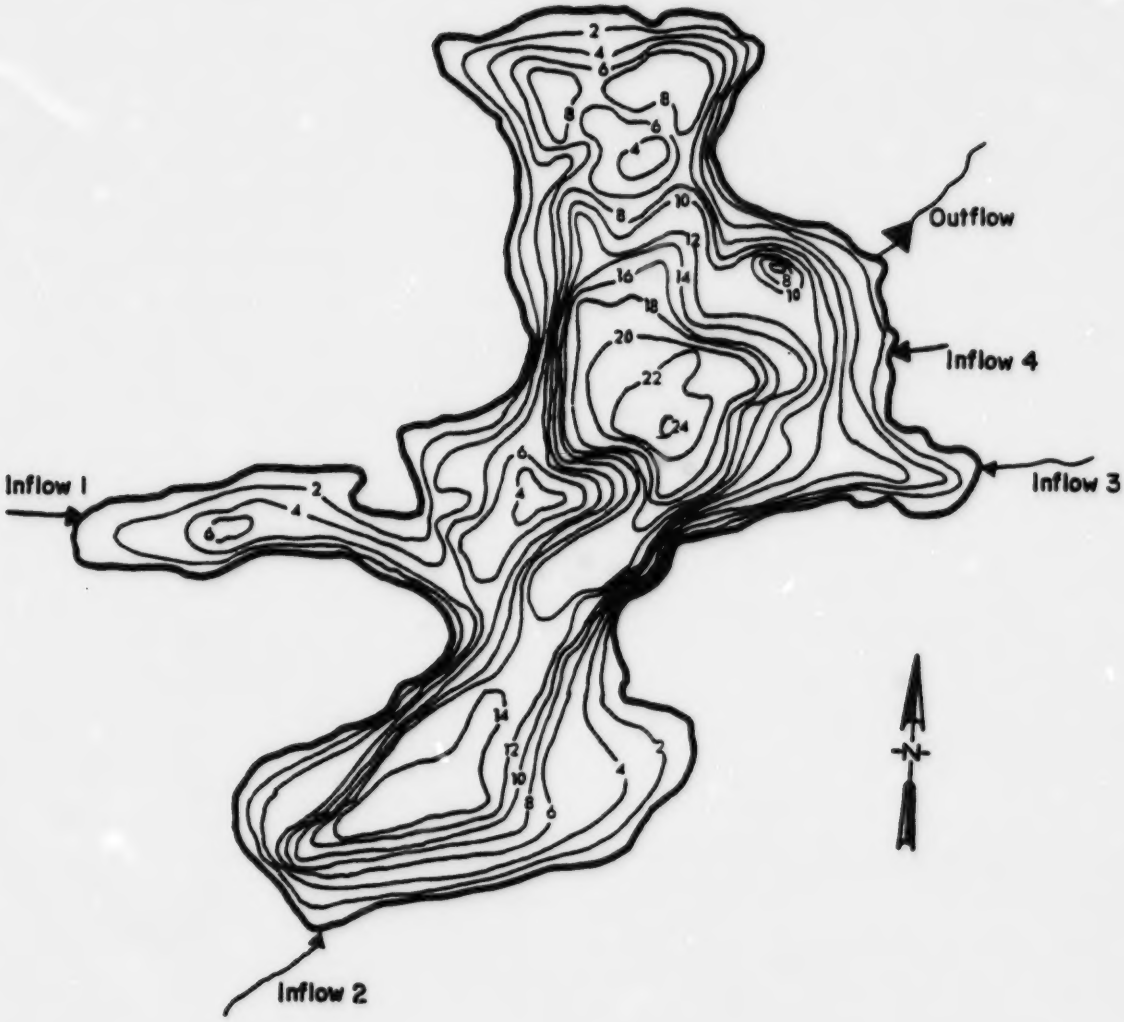
Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
0	264.	32.2
2	76.2	13.6
4	59.6	10.2
6	42.5	7.08
8	28.8	4.34
10	15.3	1.84
12	4.21	0.402
15	0.446	

BASSHAUNT LAKE

HALIBURTON Co.

GUILFORD Tp.

Lat. 45°07' Long. 78° 28'

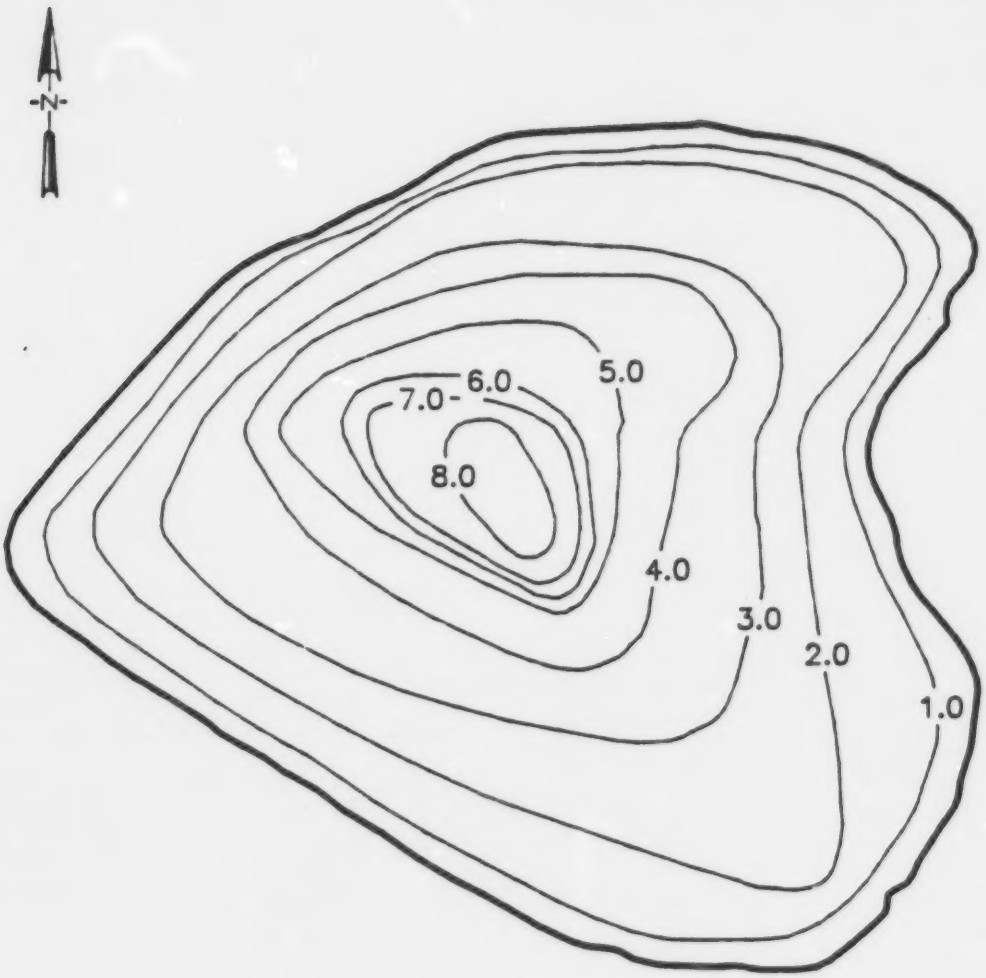


Basshaunt Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_V
47.3	36.6	7.7	24	4.85	1.99	0.96

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	47.3	8.64
2	39.2	7.11
4	32.0	5.57
6	23.9	4.25
8	18.7	3.35
10	14.9	2.63
12	11.5	1.95
14	8.07	1.26
16	4.66	0.824
18	3.60	0.594
20	2.38	0.328
22	1.00	0.091
24	0.00	

Bat Lake



0 100m

Nipissing Dist.
Canisbay Tp.
Lat.45°35' Long.78°31'

Bat Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
2.33	0.69	2.94	8.3	0.64	1.18	1.06

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	2.33	0.40
2	1.59	0.20
4	0.55	0.06
6	0.16	0.02
8.3	0.00	

BIG PORCUPINE LAKE

HALIBURTON Co.

LAWRENCE and LIVINGSTONE Tps.

Lat. 45° 27' Long. 78° 37'

CONTOUR INTERVAL IN METERS

Big Porcupine Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_V
235	177.3	7.54	30.5	17.5	3.22	0.74

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	235	
		42.0
2	185	
		33.0
4	145	
		25.6
6	111	
		19.9
8	88.1	
		15.5
10	67.2	
		11.5
12	48.0	
		8.41
16	36.4	
		6.29
18	26.7	
		4.45
20	18.1	
		3.26
22	11.6	
		1.94
24	7.95	
		1.30
26	5.17	
		0.819
28	3.11	
		0.482
30	1.78	
		0.082
30.5	1.50	

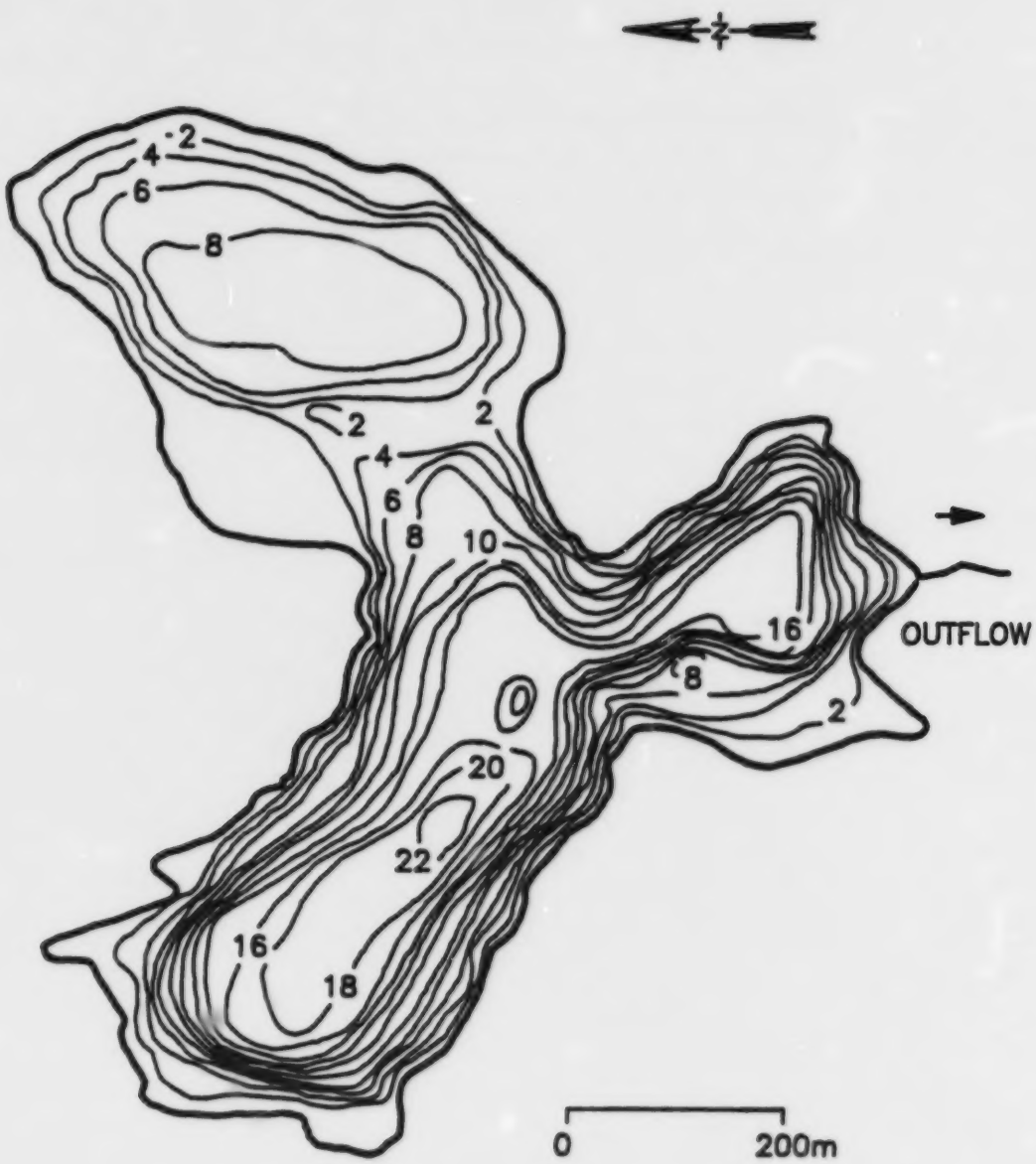
BIGWIND LAKE
MUSKOKA Dist.
OAKLEY Tp.
Lat. 45° 03' Long. 79° 03'
0m.
500m.
1000m.
12
24
8
8
8
8
8
12
16
20
24
28
30
Outflow

Bigwind Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
111	118	10.7	32	8.24	2.21	1.00

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	111	
		20.8
2	97.2	
		18.4
4	87.0	
		28.4
8	56.0	
		18.3
12	36.3	
		12.3
16	25.6	
		8.70
20	18.2	
		6.09
24	12.5	
		3.82
28	6.90	
		1.03
30	3.61	
		0.241
32	0.00	

Blue Chalk Lake



Muskoka Dist.
Ridout Tp.
Lat.45°12' Long.78°56'

Blue Chalk Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
52.35	44.68	8.5	23	4.67	1.82	1.11

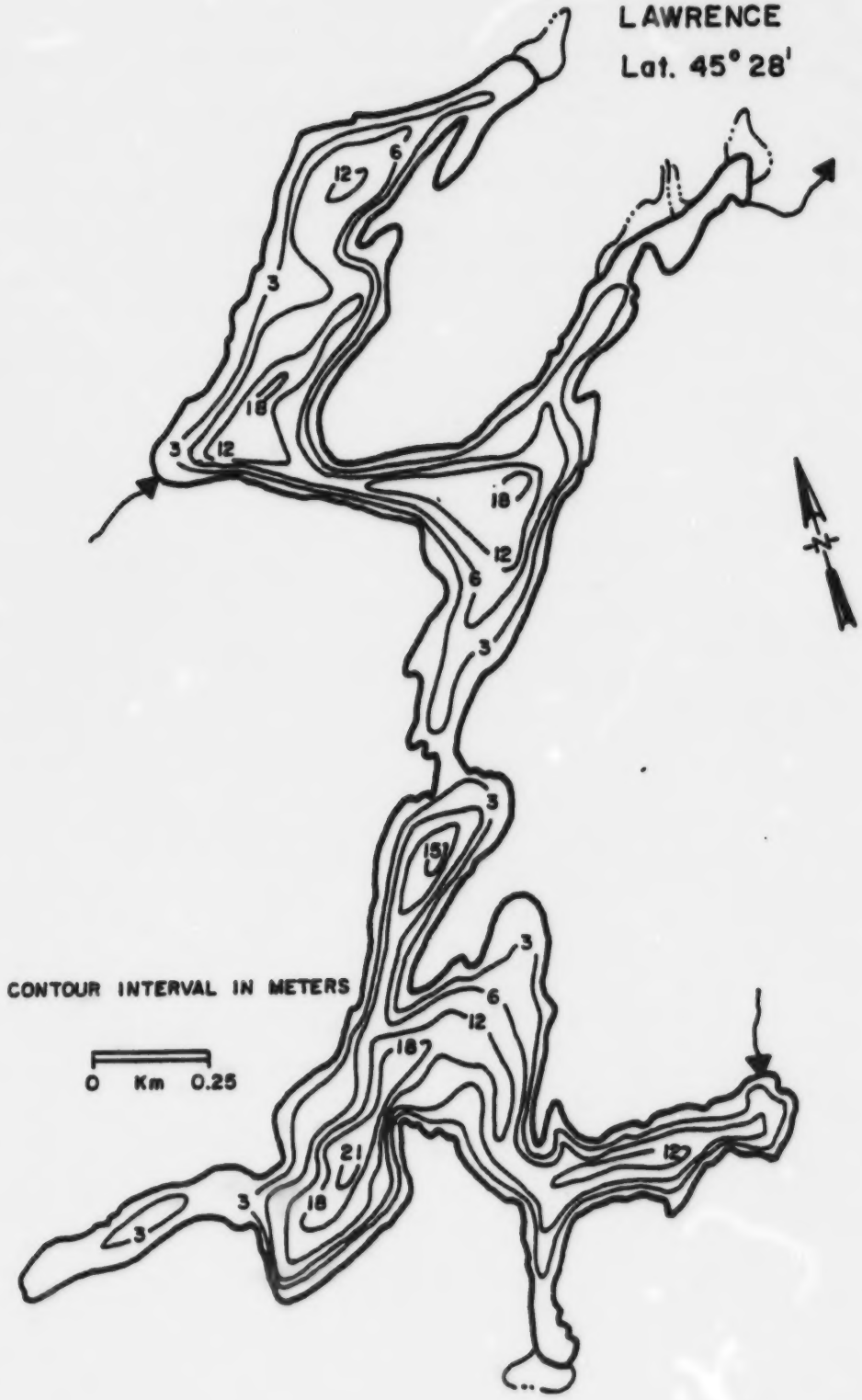
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	52.35	
		9.42
2	42.08	
		7.83
4	36.28	
		6.74
6	31.14	
		5.55
8	24.52	
		4.19
10	17.56	
		3.29
12	15.34	
		2.79
14	12.64	
		2.28
16	10.22	
		1.49
18	5.02	
		0.79
20	2.93	
		0.29
22	0.38	
		0.01
23	0.00	

BONNECHERE LAKE

HALIBURTON Co.

LAWRENCE Tp.

Lat. 45° 28' Long. 78° 35'



Bonnechere Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
105.	67.0	6.4	21.4	11.46	3.16	0.90

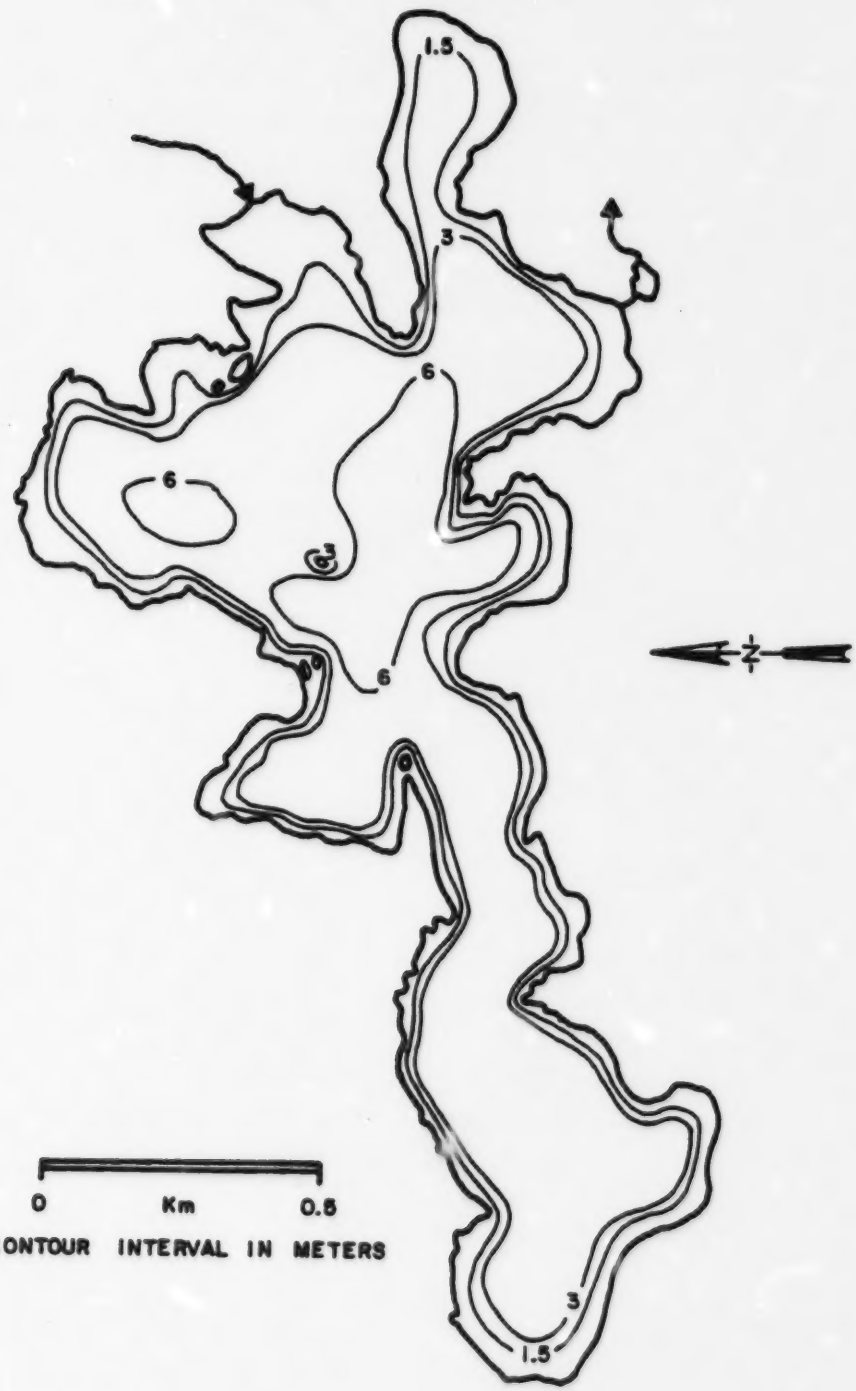
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	105	
		18.3
2	78.6	
		13.8
4	59.9	
		10.5
6	44.9	
		8.03
8	35.6	
		6.21
10	26.7	
		4.46
12	18.2	
		2.82
14	10.4	
		1.58
16	5.65	
		0.933
18	3.75	
		0.511
20	1.52	
		0.135
21.4	0.500	

BRANDY LAKE

MUSKOKA Dist.

WATT & MONCK Tp.

Lat. 45° 06' Long. 79° 31'



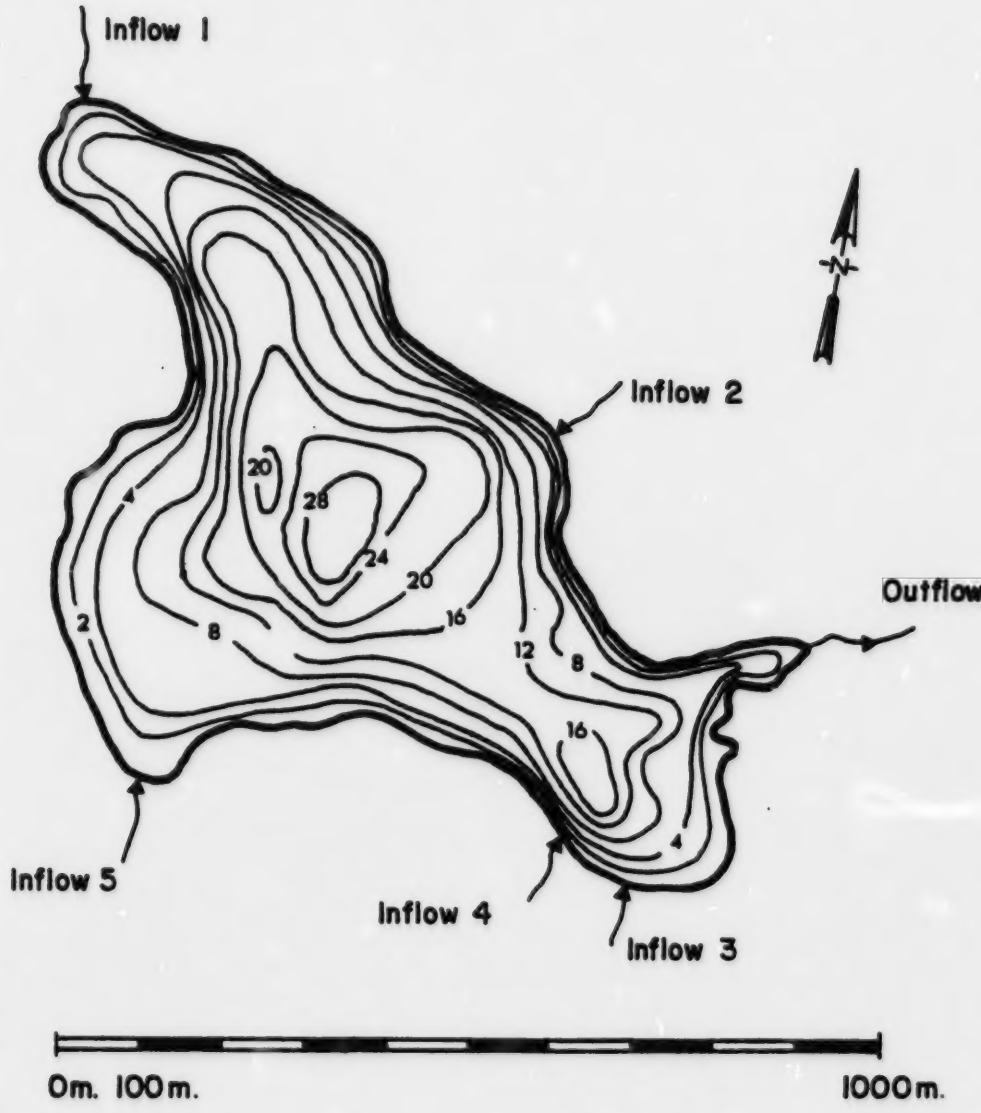
Brandy Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
108.	37.7	3.5	7.50	9.76	2.65	1.40

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	108.	
		18.5
2	77.9	
		12.3
4	46.0	
		5.68
6	13.9	
		0.697
7.5	0.00	

BUCK LAKE

MUSKOKA Dist.
SINCLAIR Tp
Lat. 45° 23' Long 79°00'

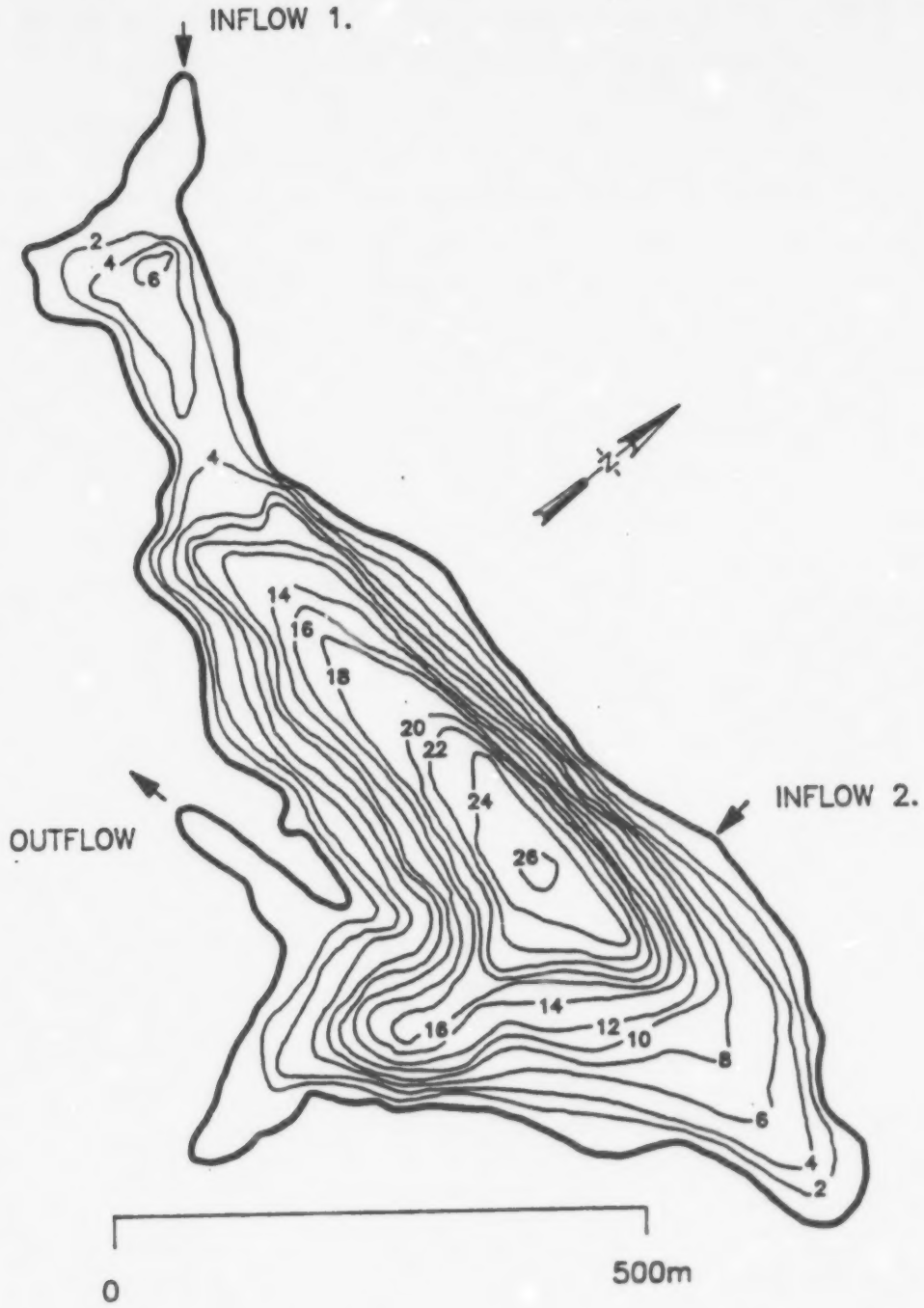


Buck Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
40.3	43.9	10.9	30	3.56	1.58	1.09

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	40.3	
2	34.9	7.52
4	31.0	6.58
6	26.8	5.77
8	22.8	4.95
10	19.5	4.22
12	16.8	3.63
14	14.5	3.13
16	11.1	2.55
18	7.95	1.90
20	6.03	1.39
22	3.79	0.974
24	2.24	0.596
26	1.55	0.377
28	0.864	0.238
30'	0.00	0.083

CHUB LAKE



Muskoka Dist.
Ridout Tp.
Lat. 45°13' Long. 78°59'

Chub Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
34.41	30.42	8.9	27	4.18	2.01	0.99

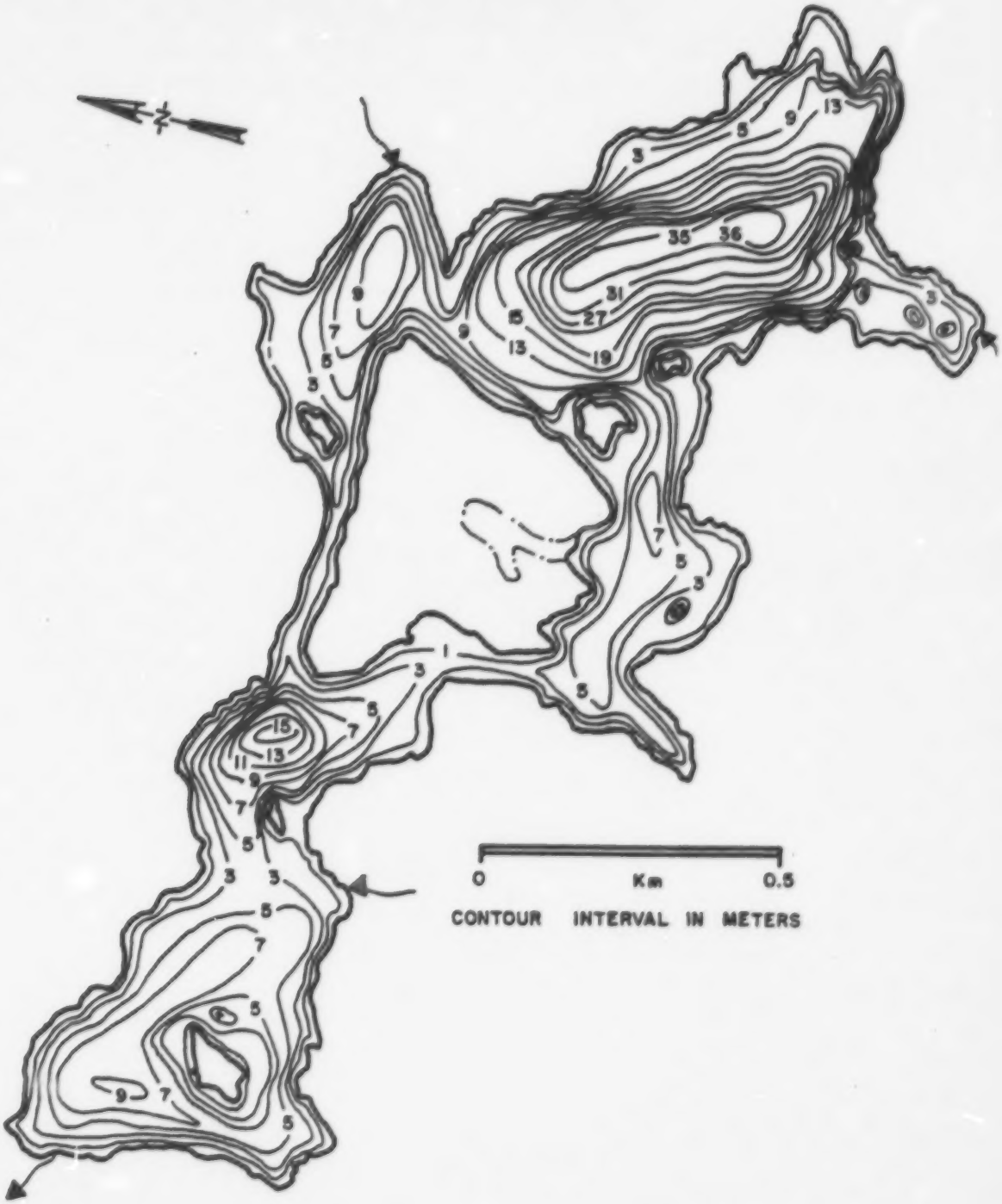
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	34.41	
		6.17
2	27.39	
		5.06
4	23.22	
		4.19
6	18.71	
		3.39
8	15.25	
		2.81
10	12.88	
		2.37
12	10.89	
		1.91
14	8.25	
		1.46
16	6.40	
		1.13
18	4.93	
		0.84
20	3.47	
		0.60
22	2.52	
		0.38
24	1.34	
		0.12
26	0.12	
		0.004
27	0.00	

CINDER LAKE

HALIBURTON Co.

HINDON Tp.

Lat. 45° 04′ Long. 78° 56′



Cinder Lake Morphometry Summary

	Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
Whole Lake	77.0	63.6	8.3	36.5	11.5	3.70	0.680
East Basin (CIE)	50.1	50.7	10.1	36.5	7.33	2.92	0.830
Main Basin (CIE)	26.9	12.8	4.8	16.0	4.15	2.25	0.890

Whole Lake			East Basin (CIE)			Main Basin		
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	77.0		0	50.1		0	26.9	
		13.8			9.07			4.78
2	61.3		2	49.2		2	21.0	
		10.8			7.11			3.64
4	46.7		4	31.6		4	15.1	
		8.00			5.61			2.39
6	33.3		6	24.5		6	8.81	
		5.55			4.31			1.22
8	23.5		8	19.6		8	3.67	
		4.08			3.64			0.433
10	18.2		10	16.8		10	1.39	
		3.34			3.13			0.207
12	15.4		12	14.7		12	0.766	
		2.87			2.75			0.112
14	13.2		14	12.8		14	0.356	
		2.44			2.39			0.033
16	11.3		16	11.2		16	0.00	
		2.10			2.09			
18	9.85		18	9.85				
		1.87			1.87			
20	8.90		20	8.90				
		1.70			1.70			
22	8.15		22	8.15				
		1.55			1.55			
24	7.19		24	7.19				
		1.35			1.35			
26	6.56		26	6.56				
		1.27			1.27			
28	5.82		28	5.82				
		1.04			1.04			
30	4.71		30	4.71				
		0.847			0.847			
32	3.70		32	3.70				
		0.634			0.634			
34	2.65		34	2.65				
		0.370			0.370			
36	0.551		36	0.551				
		0.009			0.009			
36.5	0.00		36.5	0.00				

Clara Lake

0 500m

Nipissing Dist.
McCraney Tp.
Lat.45°33' Long.78°52'

Clara Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
30.18	13.92	4.61	11.0	3.81	1.96	1.26

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	30.18	5.19
2	23.04	4.12
4	17.81	2.89
6	10.10	1.29
8	3.72	0.40
10	0.66	0.03
11	0.00	

Clear Lake
20
25
30
25
15
5
10
10
25
5
30
5
Sample Site
OUTFLOW
0
500m
Haliburton Co.
Sherborne Tp.
Lat. 45°11' Long. 78°43'

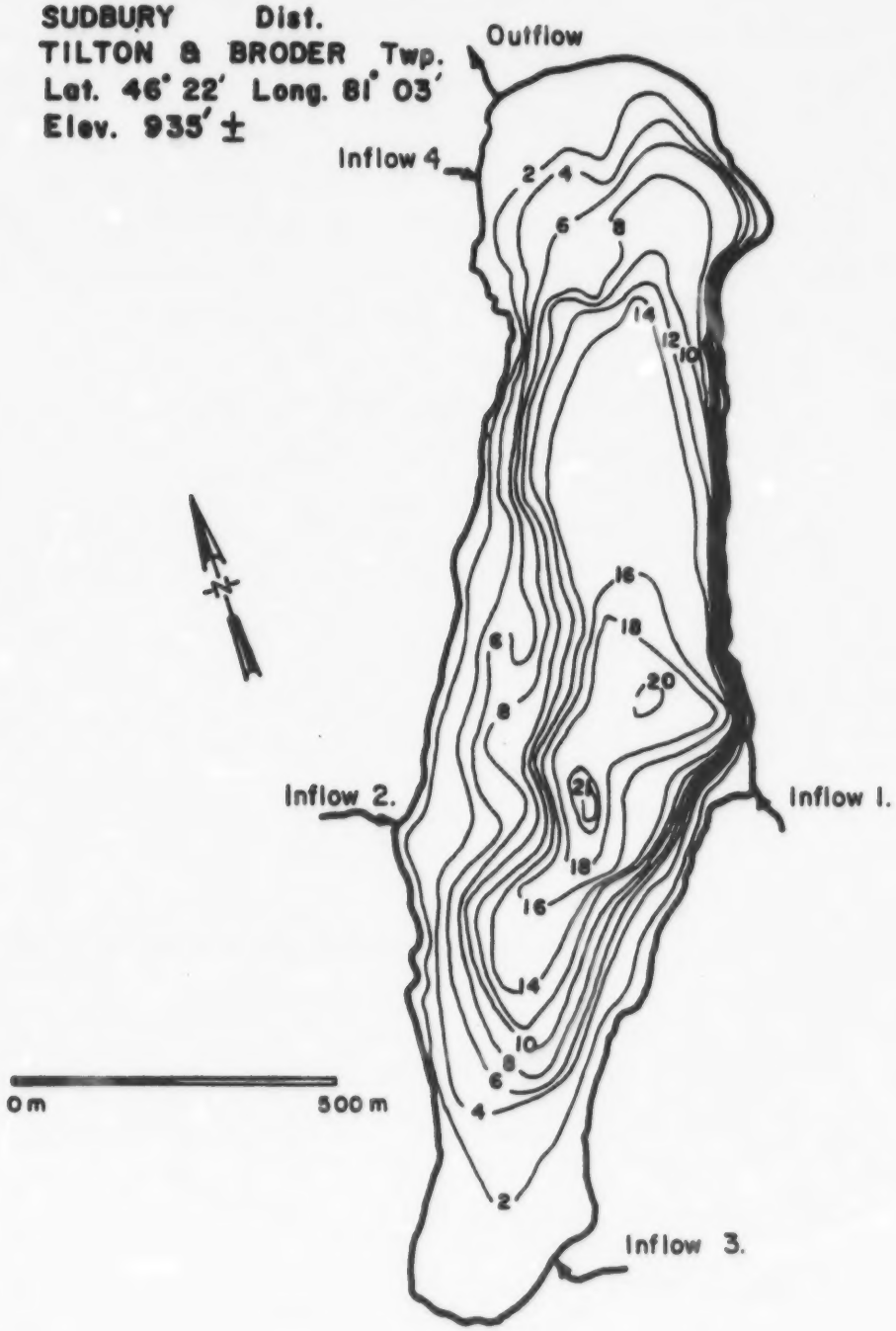
Clear Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
88.4	109.1	12.4	33.0	6.73	2.02	1.12

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	88.4	
		16.5
2	77.0	
		14.3
4	66.4	
		12.5
6	58.4	
		11.1
8	52.7	
		10.0
10	47.3	
		8.89
12	41.6	
		7.79
14	36.3	
		6.73
16	31.1	
		5.70
18	26.0	
		4.72
20	21.3	
		3.76
22	16.4	
		2.84
24	12.1	
		2.03
26	8.28	
		1.32
28	5.04	
		0.751
30	2.60	
		0.250
33	0.298	

CLEARWATER LAKE

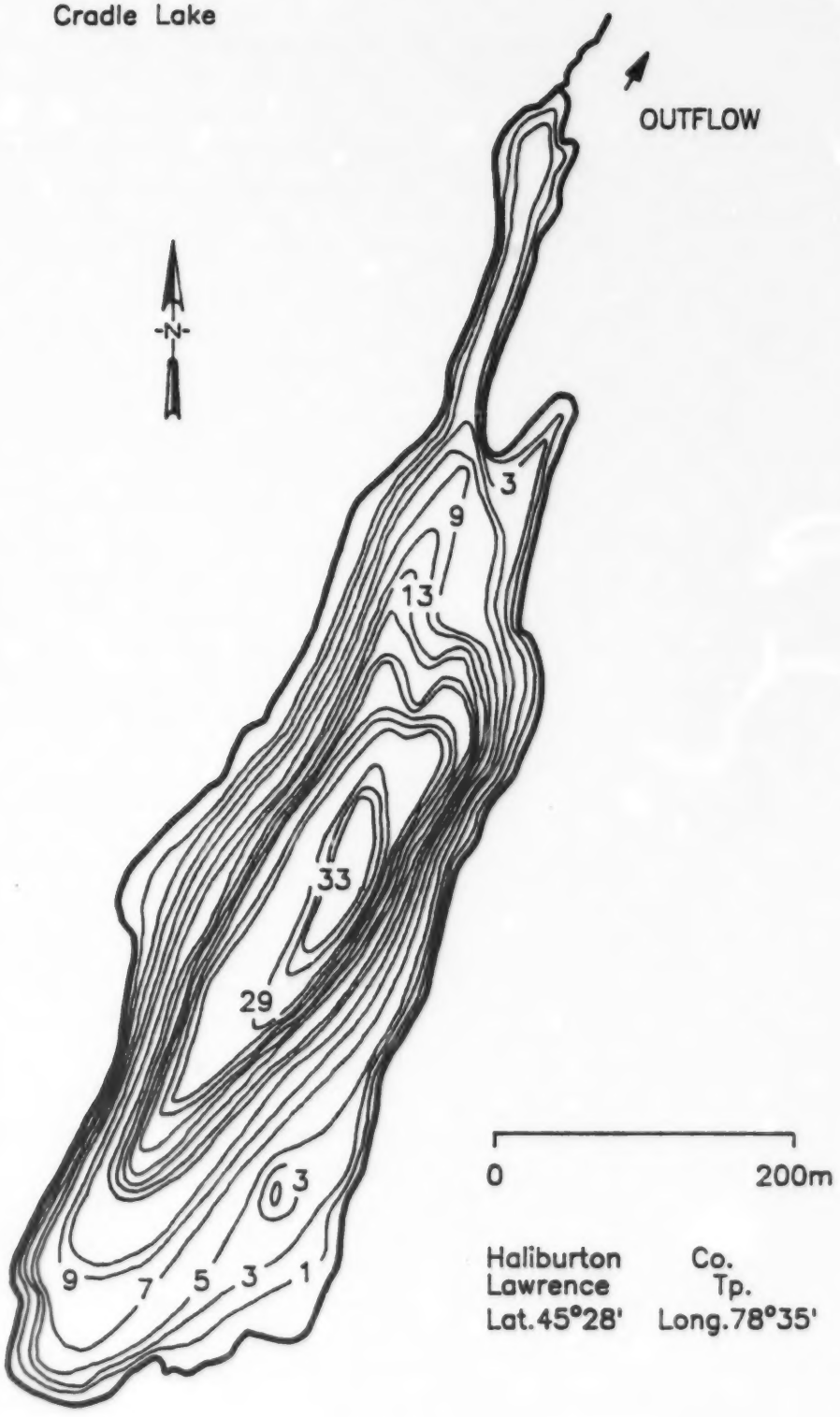
SUDBURY Dist.
TILTON & BRODER Twp.
Lat. 46° 22′ Long. 81° 03′
Elev. 935′ ±



Clearwater Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
76.5	64.2	8.39	21.5	4.97	1.60	1.20

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	76.5	
		13.8
2	61.5	
		11.3
4	51.5	
		9.59
6	44.4	
		8.12
8	36.9	
		6.70
10	30.3	
		5.60
12	25.8	
		4.64
14	20.8	
		2.77
16	7.94	
		1.23
18	4.56	
		0.454
20	0.599	
		0.033
21	0.120	
		0.002
21.5	0.00	

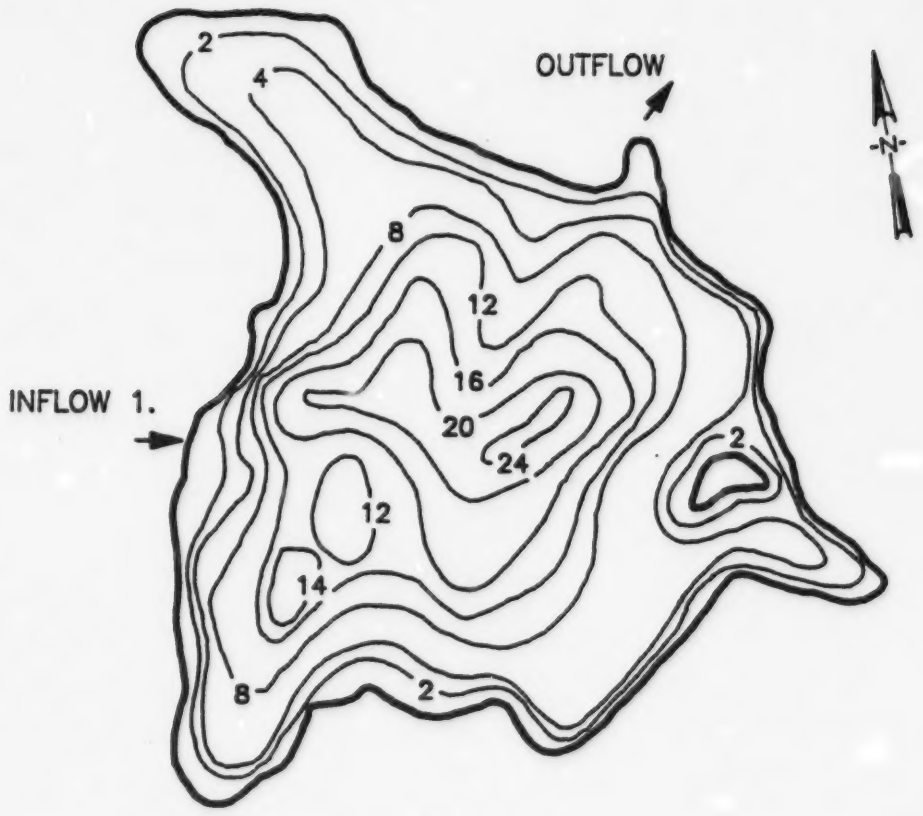

Cradle Lake
OUTFLOW
N
3
9
13
33
29
3
9
7
5
3
1
0
200m
Haliburton Co.
Lawrence Tp.
Lat. 45°28' Long. 78°35'

Cradle Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
17.89	22.25	12.44	33.3	2.44	1.63	1.12

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	17.89	
		3.42
2	16.34	
		3.11
4	14.74	
		2.77
6	12.78	
		2.35
8	10.86	
		2.00
10	9.04	
		1.63
12	7.50	
		1.38
14	6.24	
		1.13
16	5.25	
		0.99
18	4.56	
		0.85
20	3.96	
		0.74
22	3.42	
		0.63
24	2.87	
		0.52
26	2.39	
		0.41
28	1.42	
		0.19
30	0.65	
		0.10
32	0.40	
		0.04
33.3	0.00	

CROSSON LAKE



0 500m

Muskoka Dist.
Oakley Tp.
Lat. 45° 05' Lona. 79° 02'

Crosson Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
56.74	52.16	9.2	25.0	4.40	1.65	1.10

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	56.74	
2	50.28	10.70
4	42.80	9.30
6	34.75	7.74
8	26.83	6.14
10	22.13	4.89
12	17.77	3.98
14	13.75	3.14
16	9.92	2.36
18	7.48	1.73
20	5.15	1.26
22	1.83	0.67
24	0.58	0.23
25	0.00	0.02

CROWN LAKE

HALIBURTON Co.

LIVINGSTONE Tp.

Lat. 45° 26' Long. 78° 40'

Crown Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
136.	108.4	8.0	30.0	10.01	2.42	0.80

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	136	
		25.0
2	114	
		20.7
4	93.7	
		16.9
6	75.5	
		13.2
8	56.7	
		9.67
10	40.5	
		6.72
12	27.1	
		4.84
14	21.4	
		3.78
16	16.4	
		2.84
18	12.1	
		2.00
20	8.01	
		1.26
22	4.76	
		.697
24	2.35	
		.392
26	1.59	
		.255
28	.980	
		.147
30	.516	

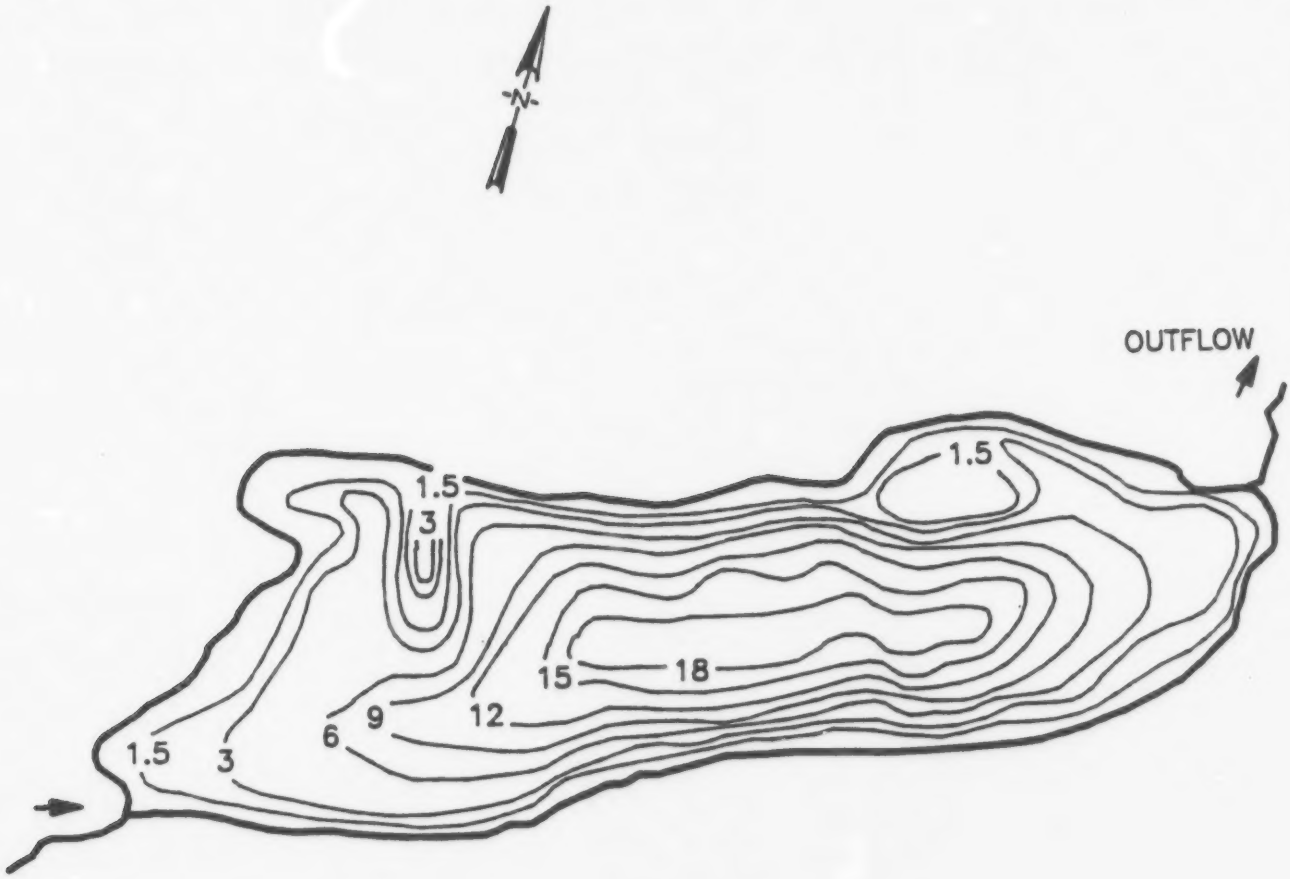
Crystal Lake
OUTFLOW
N
1
1
3
5
7
17
15
9
7
5
9
3
1
0
500m
Haliburton Co.
Lawrence Tp.
Lat.45°23' Long.78°29'

Crystal Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
41.02	17.77	4.33	17.1	5.61	2.47	0.76

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	41.02	
		6.25
2	24.72	
		4.20
4	17.11	
		2.89
6	12.08	
		1.98
8	7.60	
		1.15
10	4.40	
		0.69
12	2.71	
		0.43
14	1.68	
		0.24
16	0.64	
		0.04
17.1	0.00	

Delano Lake



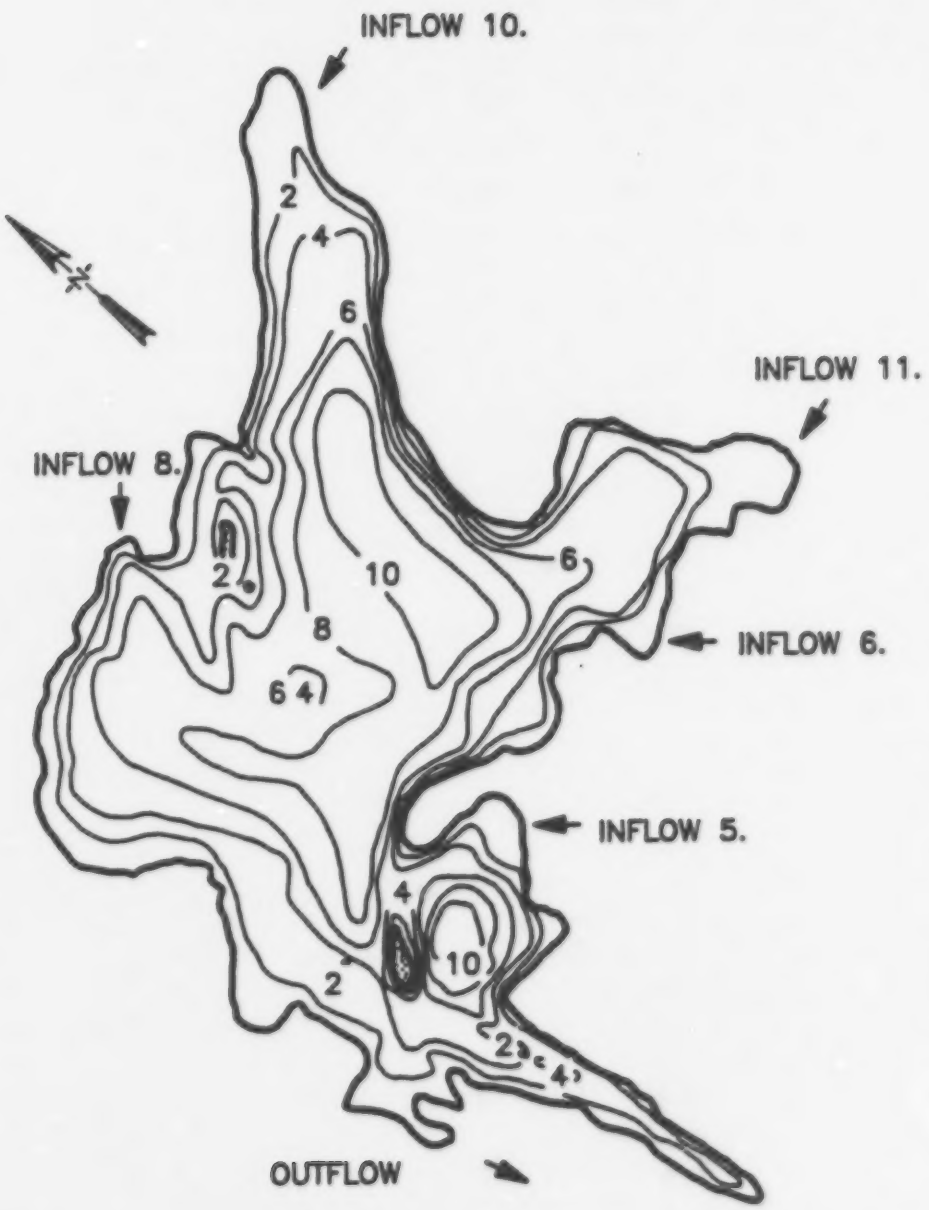
Nipissing Dist.
Canisbay Tp.
Lat.45°31' Long.78°36'

Delano Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
23.9	17.04	7.13	18.6	1.99	1.15	1.14

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	23.9	
		4.27
2	18.9	
		3.25
4	13.7	
		2.45
6	10.8	
		1.98
8	9.01	
		1.61
10	7.13	
		1.29
12	5.79	
		1.01
14	4.36	
		0.710
16	2.80	
		0.432
18	1.58	
		0.032
18.6	0.00	

DICKIE LAKE



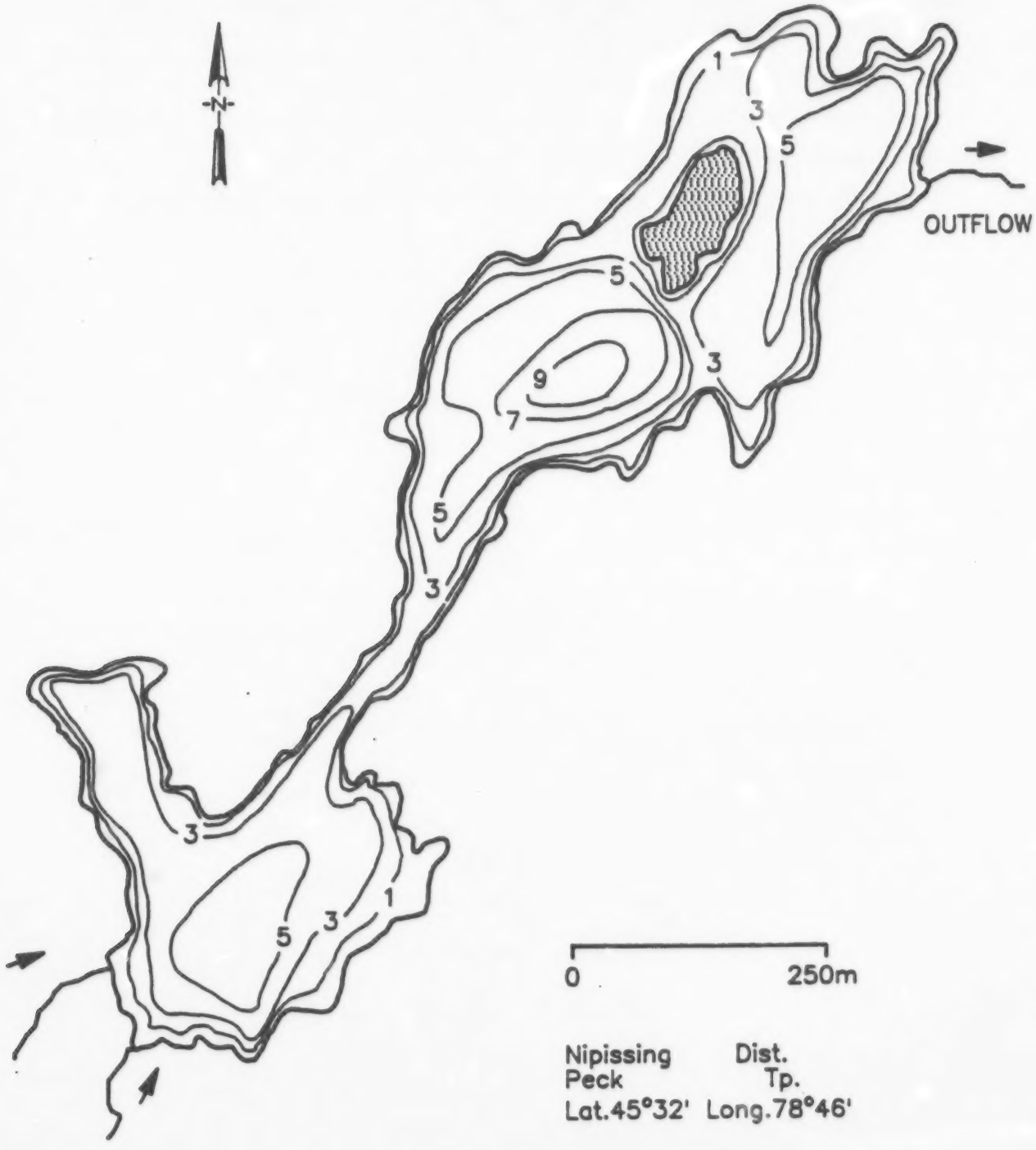
Muskoka Dist.
McLean Tp.
Lat. 45°09' Long. 79°05'.

Dickie Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
93.6	46.65	5.0	12	8.22	2.40	1.25

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	93.60	
		16.81
2	74.84	
		7.02
3	65.72	
		6.13
4	56.94	
		4.87
5	40.81	
		3.75
6	34.23	
		3.05
7	27.00	
		2.28
8	18.76	
		1.56
9	12.58	
		0.89
10	5.61	
		0.28
11	0.76	
		0.03
12	0.00	

Drummer Lake



Nipissing Dist.
Peck Tp.
Lat.45°32' Long.78°46'

Drummer Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
24.17	8.75	3.62	10.2	4.44	2.55	1.07

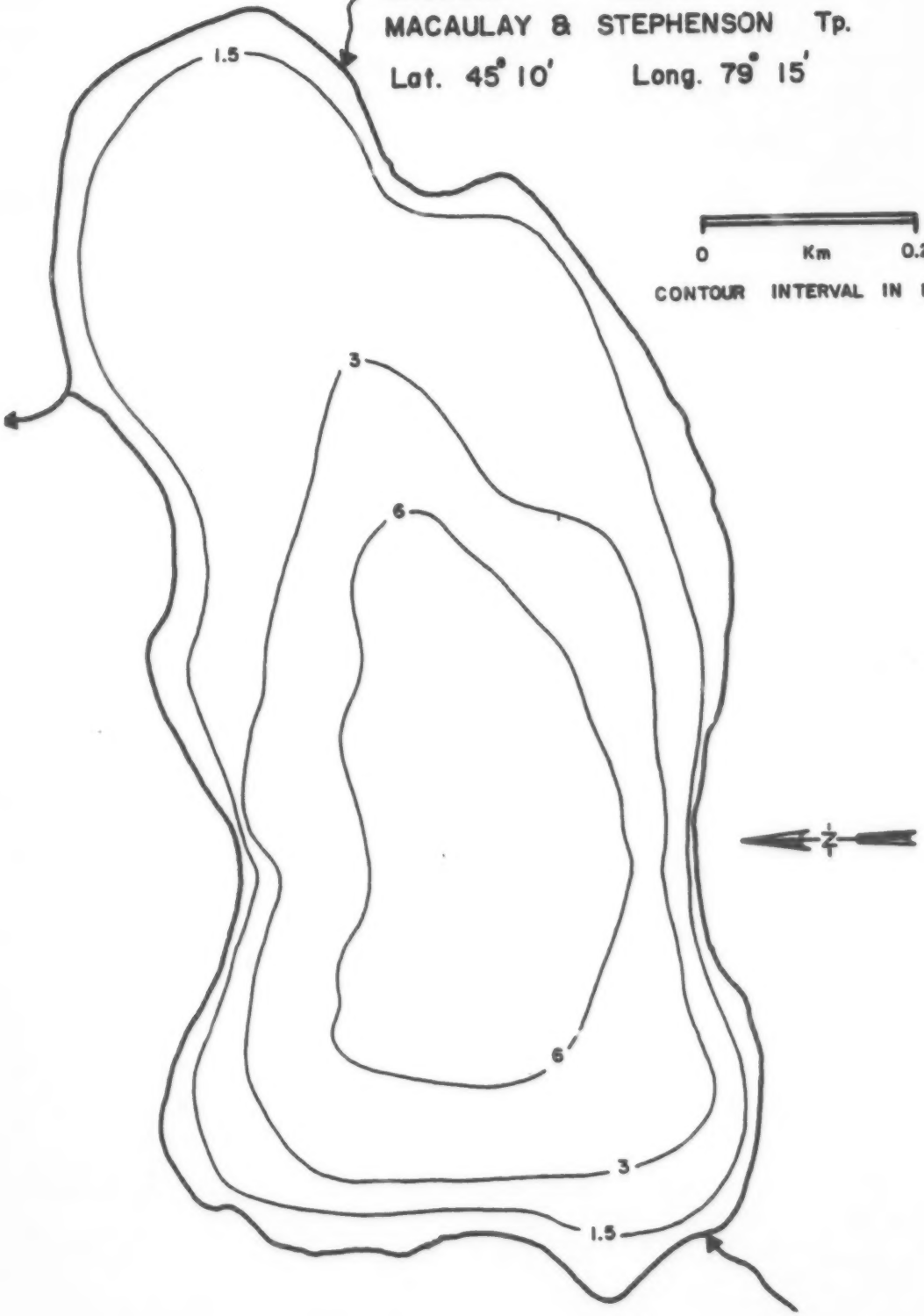
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	24.17	
		4.10
2	17.43	
		2.86
4	10.33	
		1.35
6	3.55	
		0.35
8	0.87	
		0.08
10.2	0.00	

FAWN LAKE

MUSKOKA Dist.

MACAULAY & STEPHENSON Tp.

Lat. 45° 10' Long. 79° 15'



Fawn Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
85.8	30.2	3.5	7.92	4.08	1.24	1.34

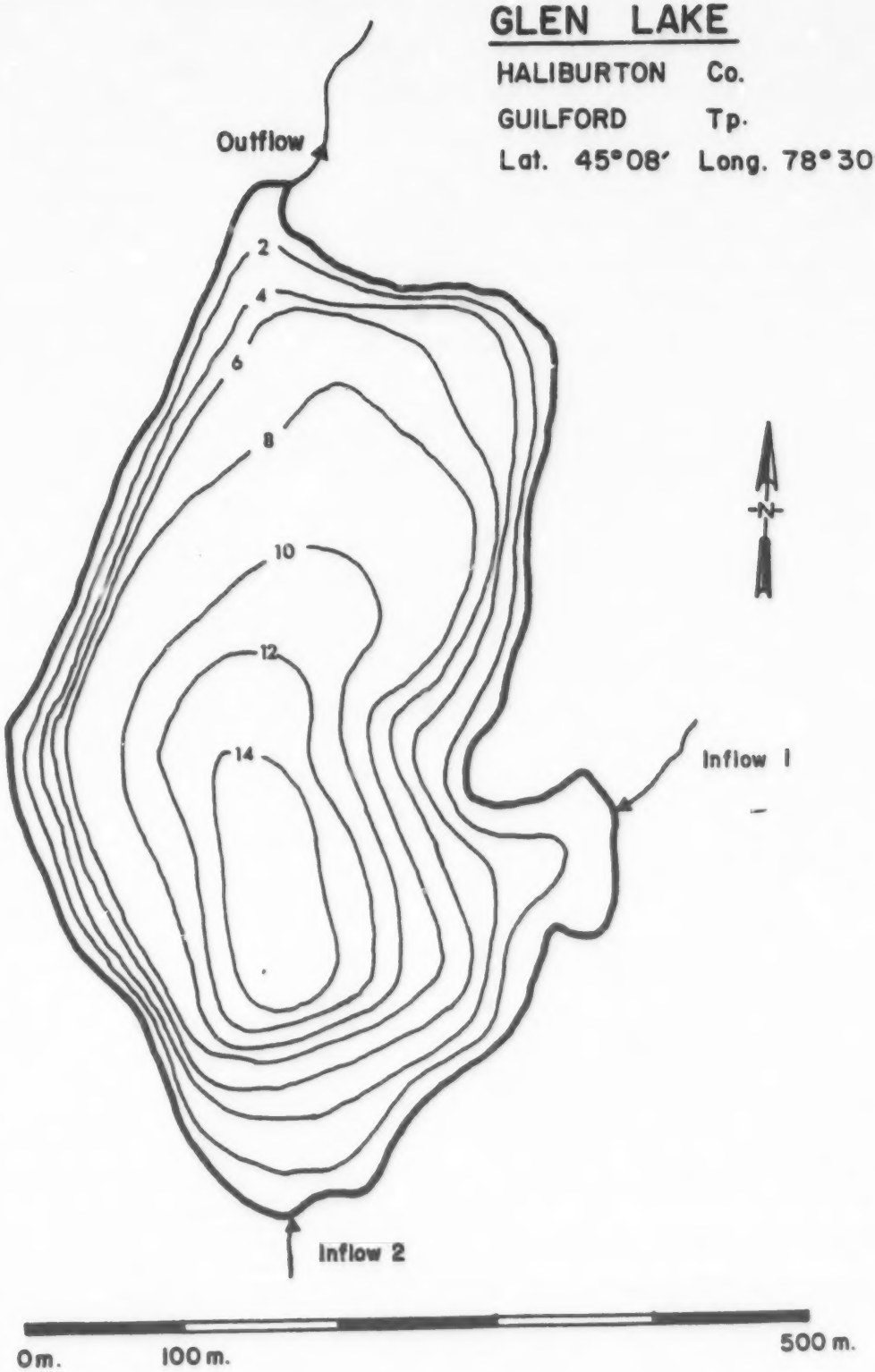
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	85.8	15.3
2	73.1	8.68
4	39.8	4.94
6	17.6	1.24
7.9	0.00	

GLEN LAKE

HALIBURTON Co.

GUILFORD Tp.

Lat. 45°08′ Long. 78°30′



Glen Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
16.3	11.8	7.2	15	1.83	1.28	1.44

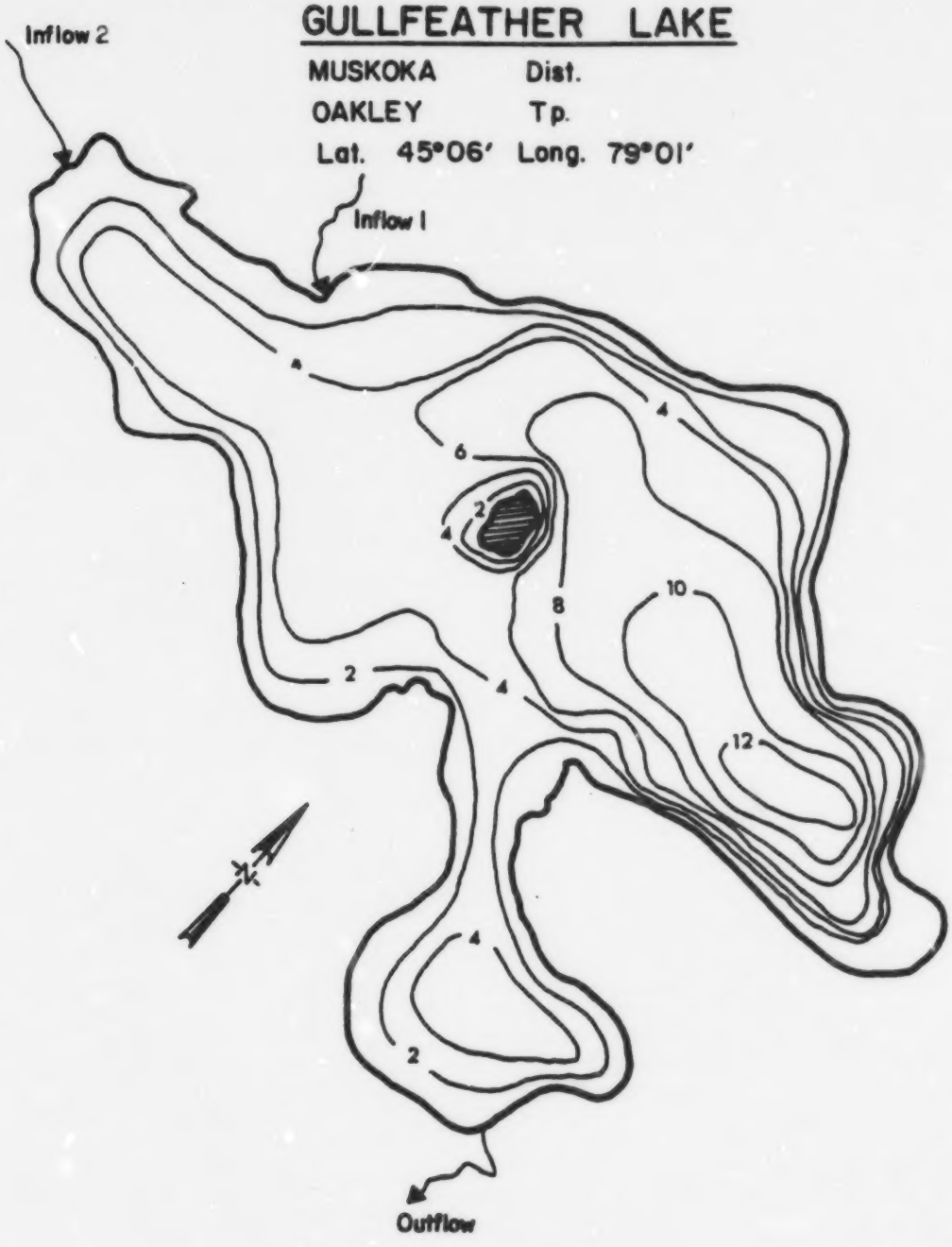
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	16.3	3.02
2	13.9	2.59
4	12.0	2.21
6	10.1	1.79
8	7.81	1.17
10	4.13	0.638
12	2.34	0.321
14	0.976	0.032
15	0.00	

GULLFEATHER LAKE

MUSKOKA Dist.

OAKLEY Tp.

Lat. 45°06′ Long. 79°01′



Gullfeather Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_V
65.9	31.5	4.8	13	5.26	1.83	1.11

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	65.9	
		11.6
2	50.8	
		8.75
4	37.1	
		5.63
6	20.1	
		3.25
8	12.6	
		1.66
10	4.66	
		0.533
12	1.09	
		0.036
13	0.00	

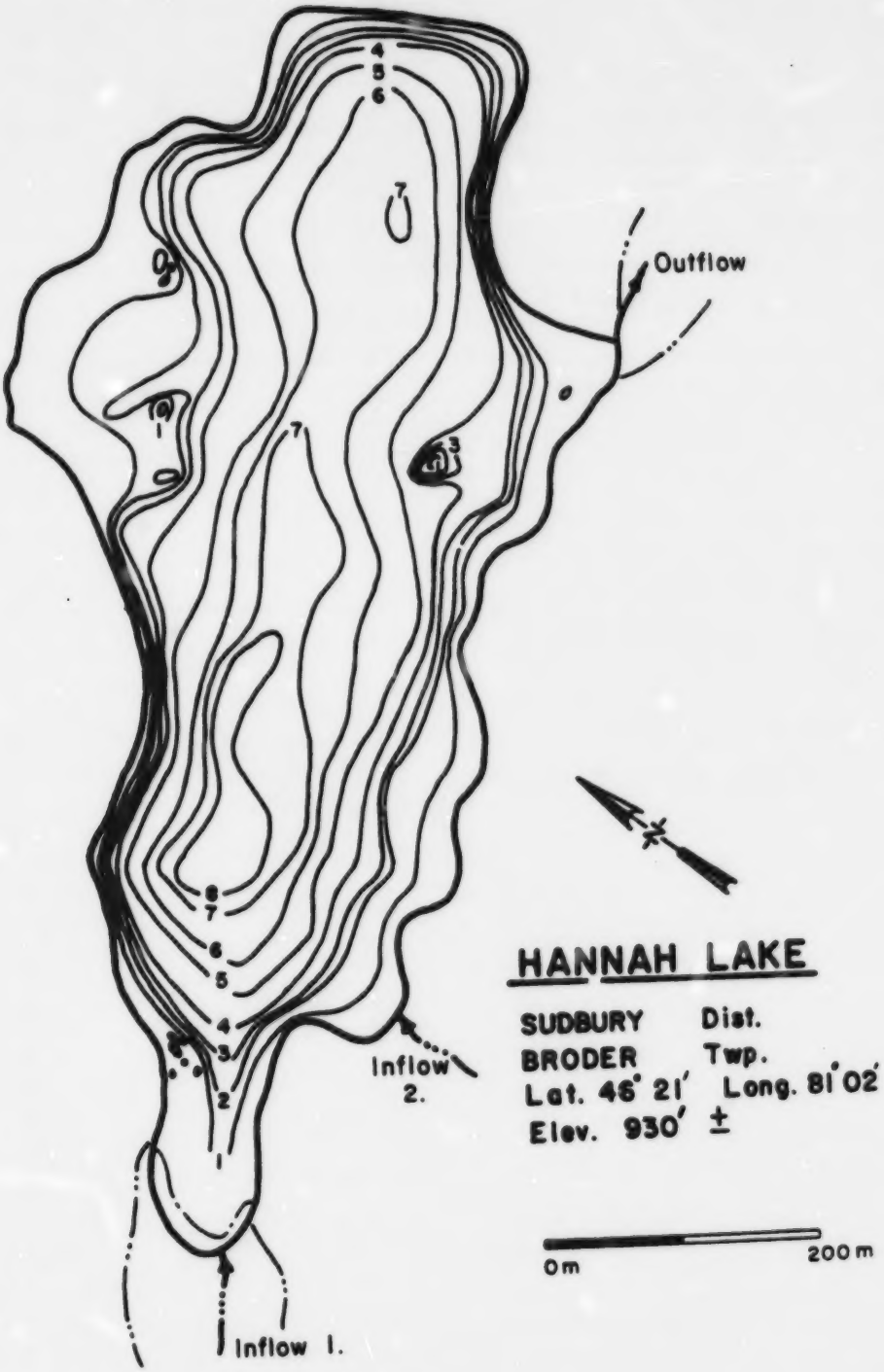
Hamer Lake

Parry Sound Dist.
Humphrey Tp.
Lat.45°14' Long.79°48'

Hamer Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
35.21	11.63	3.30	8.5	4.04	1.92	1.17

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	35.21	6.199
2	26.84	3.928
4	11.19	1.118
6	3.109	0.385
8.5	0.000	

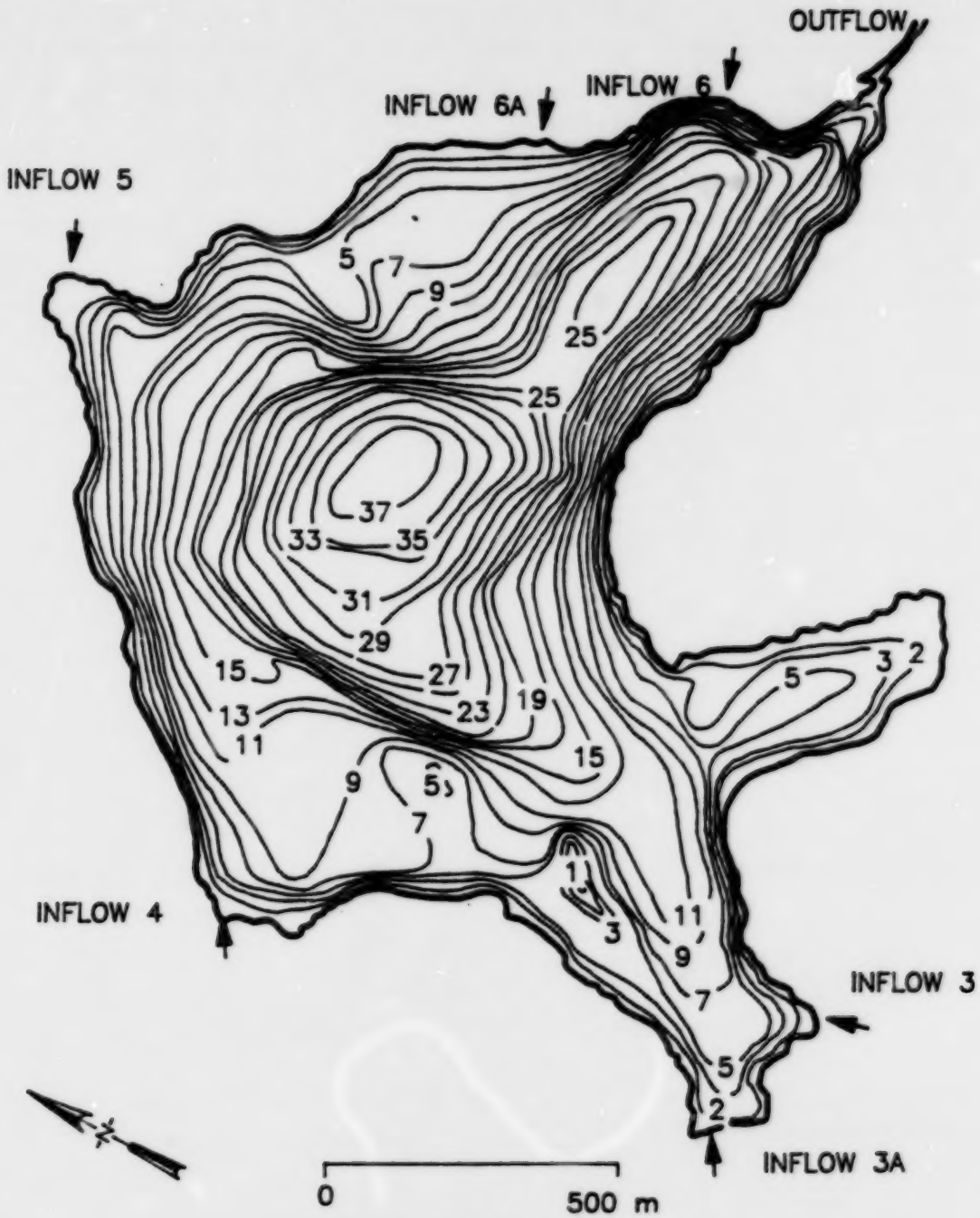

Outflow
Inflow 2.
Inflow 1.
HANNAH LAKE
SUDBURY Dist.
BRODER Twp.
Lat. 46° 21′ Long. 81° 02′
Elev. 930′ ±
0m
200 m

Hannah Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
27.3	10.8	3.97	8.5	2.7	1.46	1.40

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	27.30	
		2.46
1	22.08	
		2.06
2	19.14	
		1.83
3	17.48	
		1.63
4	15.18	
		1.30
5	11.02	
		0.895
6	7.03	
		0.472
7	2.74	
		0.166
8	0.78	
		0.013
8.5	0.00	

Harp Lake



Muskoka Dist.
Chaffey Tp.
Lat. 45°23' Long. 79°07'

Harp Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
71.38	95.07	13.32	37.5	4.75	1.59	0.93

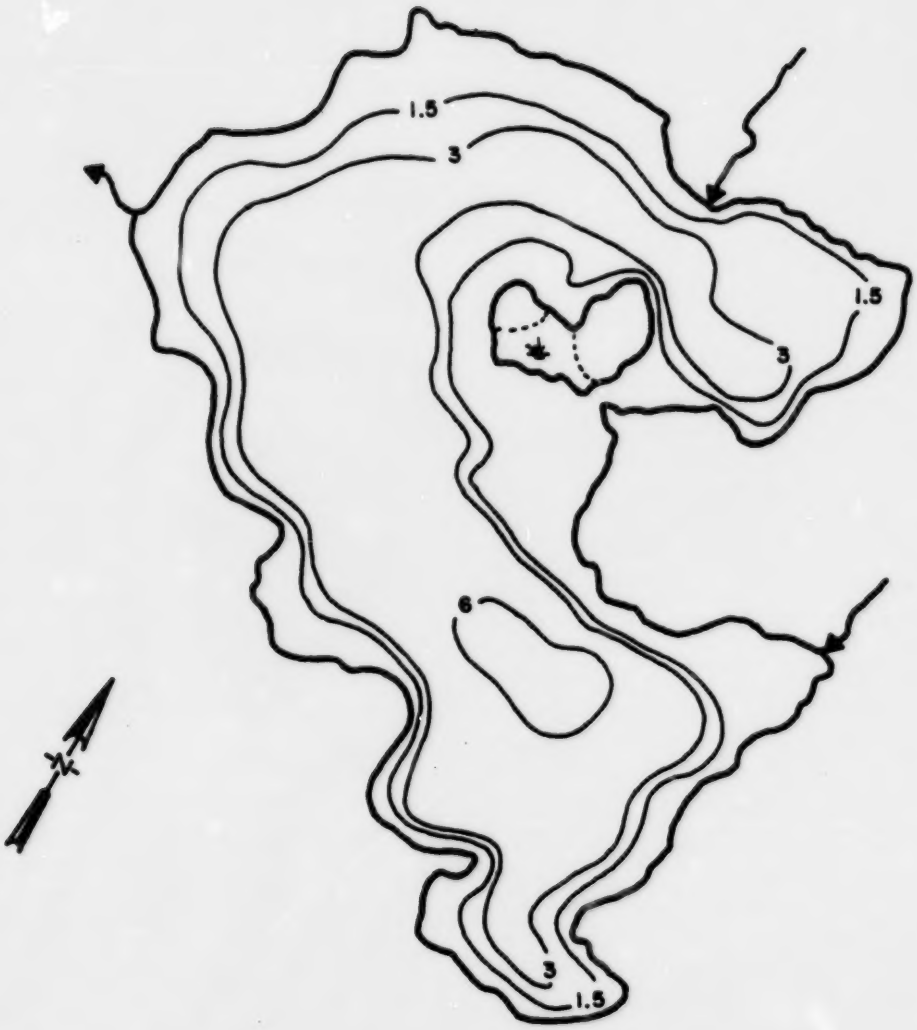
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	71.38	
		13.75
2	66.10	
		12.43
4	58.64	
		11.06
6	51.73	
		9.64
8	44.77	
		8.29
10	38.13	
		7.02
12	32.47	
		6.02
14	27.85	
		5.16
16	23.93	
		4.45
18	20.61	
		3.82
20	17.69	
		3.28
22	15.20	
		2.79
24	12.43	
		2.19
26	9.69	
		1.71
28	7.42	
		1.29
30	5.62	
		0.97
32	3.99	
		0.65
34	2.64	
		0.42
36	1.48	
		0.14
37.5	0.00	

HEALEY LAKE

MUSKOKA Dist.

MACAULAY Tp.

Lat. 45° 05' Long. 79° 11'



0 Km 0.5

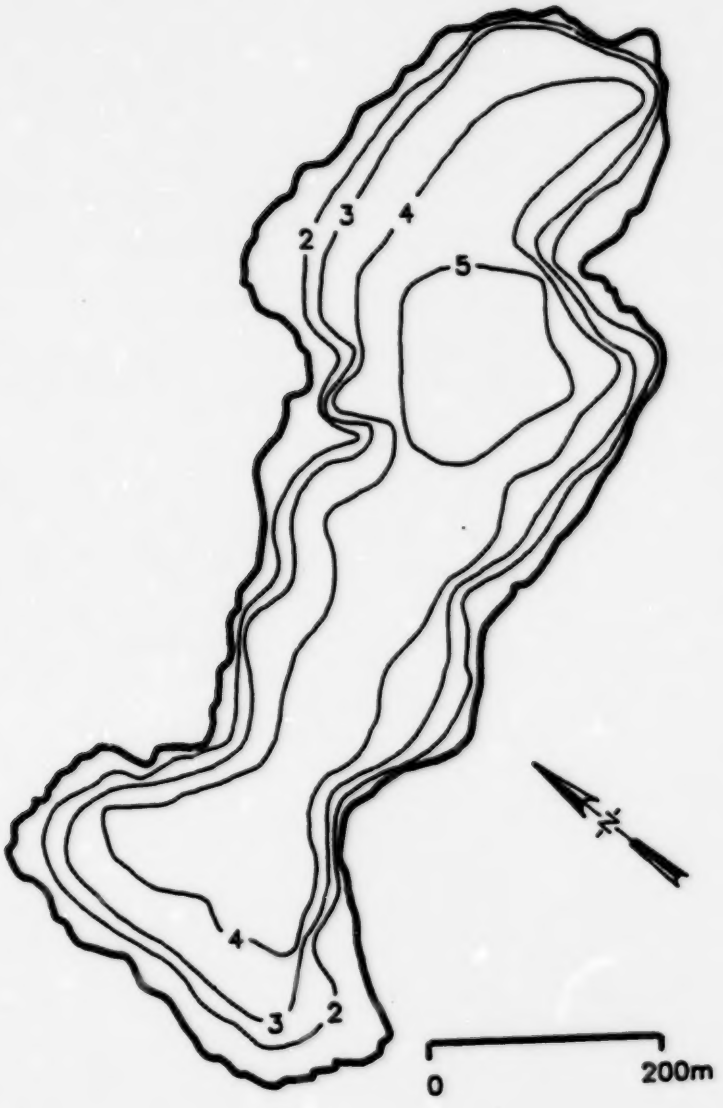
CONTOUR INTERVAL IN METERS

Healey Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
122.	33.7	2.8	7.00	7.48	1.91	1.19

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	122.0	
		19.2
2	73.4	
		11.1
4	33.6	
		3.36
6	4.48	
		0.151
7	0.00	

HENEY LAKE

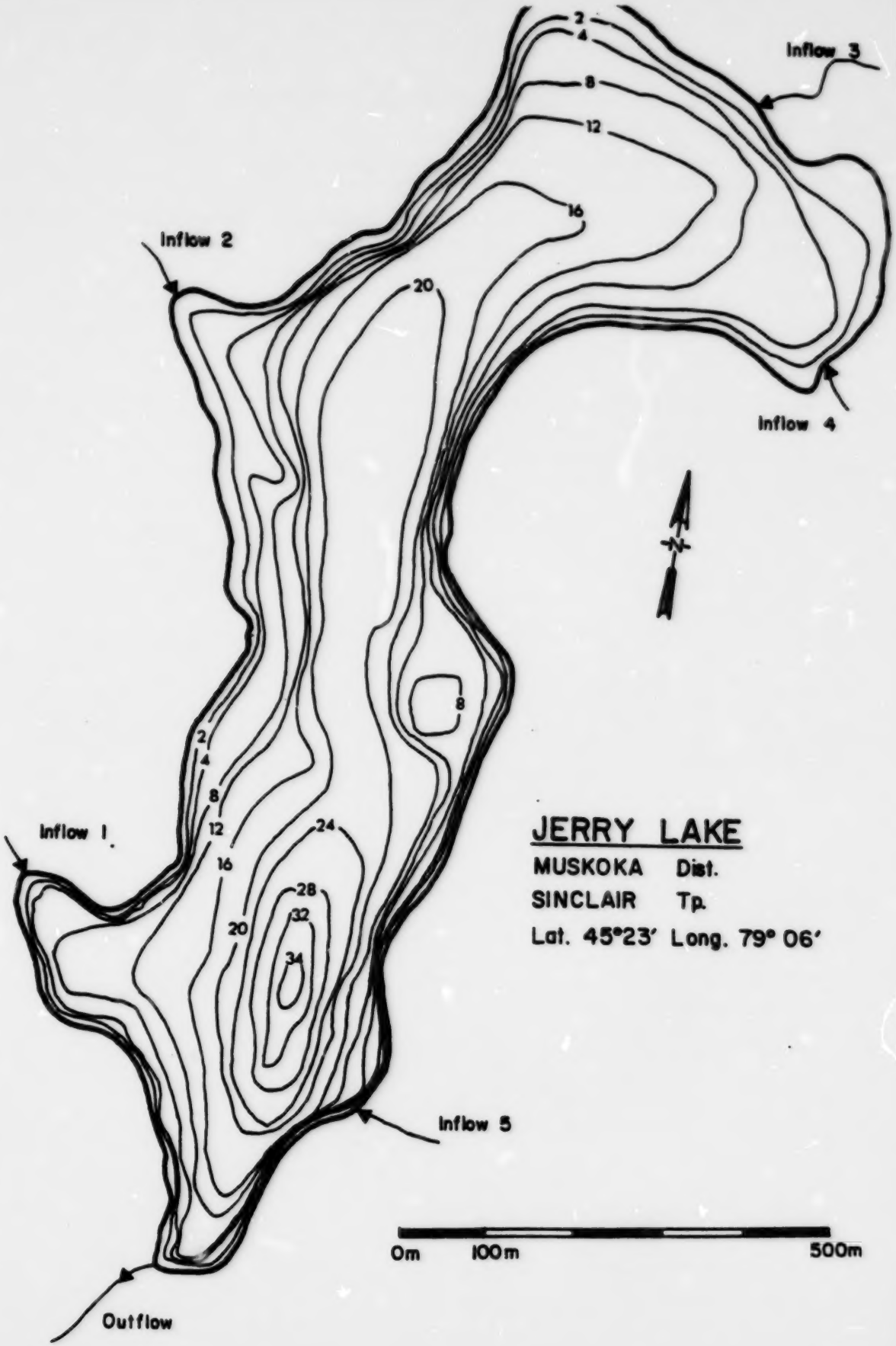


Muskoka District
McLean Tp.
Lat.45°08' Long.79°06'

Heney Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
21.37	7.05	3.29	5.8	2.72	1.66	1.70

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	21.37	2.02
1	19.04	1.79
2	16.84	1.55
3	14.23	1.14
4	8.79	0.53
5	1.81	0.05
5.8	0.00	



JERRY LAKE

MUSKOKA Dist.

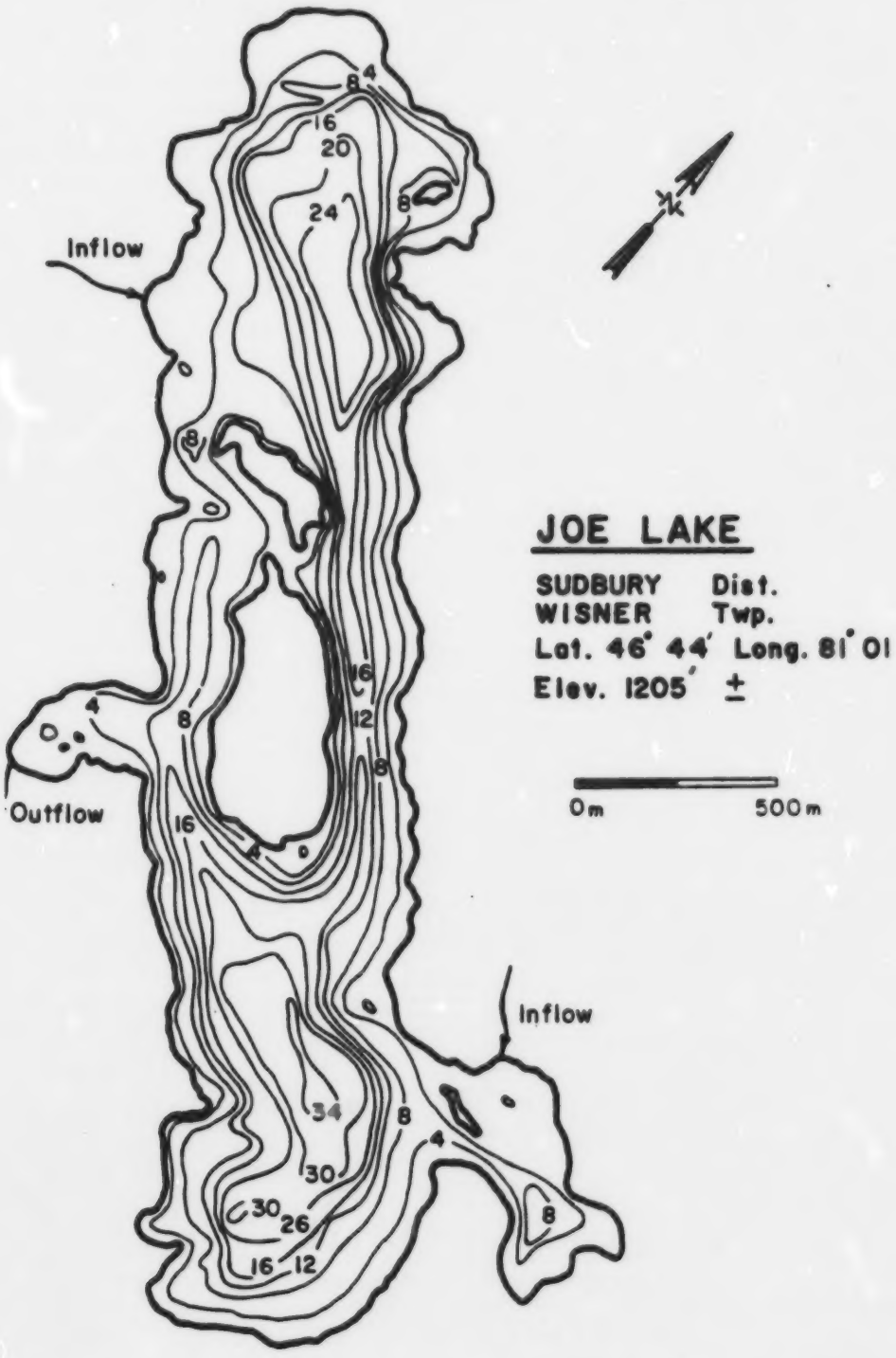
SINCLAIR Tp.

Lat. 45°23' Long. 79° 06'

Jerry Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
50.1	61.9	12.4	35	4.60	1.83	1.06

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	50.1	
		9.51
2	45.0	
		8.54
4	40.5	
		14.5
8	32.3	
		11.4
12	24.8	
		8.39
16	17.3	
		3.13
18	14.0	
		2.41
20	10.2	
		2.57
24	3.28	
		0.955
28	1.59	
		0.433
32	0.64	
		0.070
34	0.125	
		0.004
35	0.00	


4
8
16
20
24
8
Inflow
8
0
4
8
16
12
8
Outflow
16
Inflow
34
8
4
30
30
26
8
16
12
JOE LAKE
SUDBURY Dist.
WISNER Twp.
Lat. 46° 44' Long. 81° 01'
Elev. 1205' ±
0m
500m

Joe Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
179.6	201.0	11.2	34.0	14.2	2.99	0.99

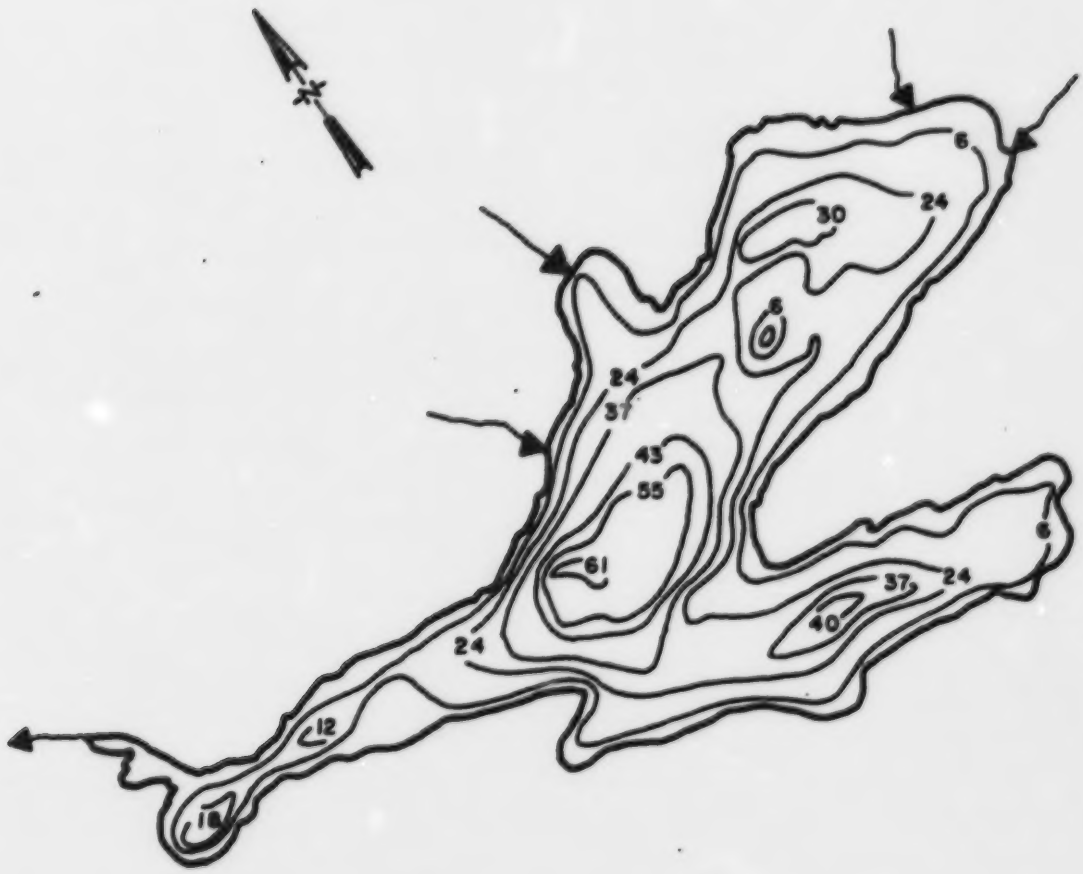
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	179.6	32.8
2	149.1	27.5
4	126.4	23.4
6	107.6	20.0
8	92.7	17.2
10	79.4	14.7
12	67.9	12.7
14	58.7	11.0
16	51.2	9.61
18	45.0	8.35
20	38.6	6.99
22	31.4	5.59
24	24.6	4.11
26	16.8	2.88
28	12.1	2.09
30	8.86	1.52
32	6.45	0.680
34	1.12	0.037
35	0.00	

KIMBALL LAKE

HALIBURTON Co.

LIVINGSTONE Tp.

Lat. 45° 21' Long. 78° 41'



0 Km 1.0

CONTOUR INTERVAL IN METERS

Kimball Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
213.	464.0	22.0	61.0	10.84	2.09	1.08

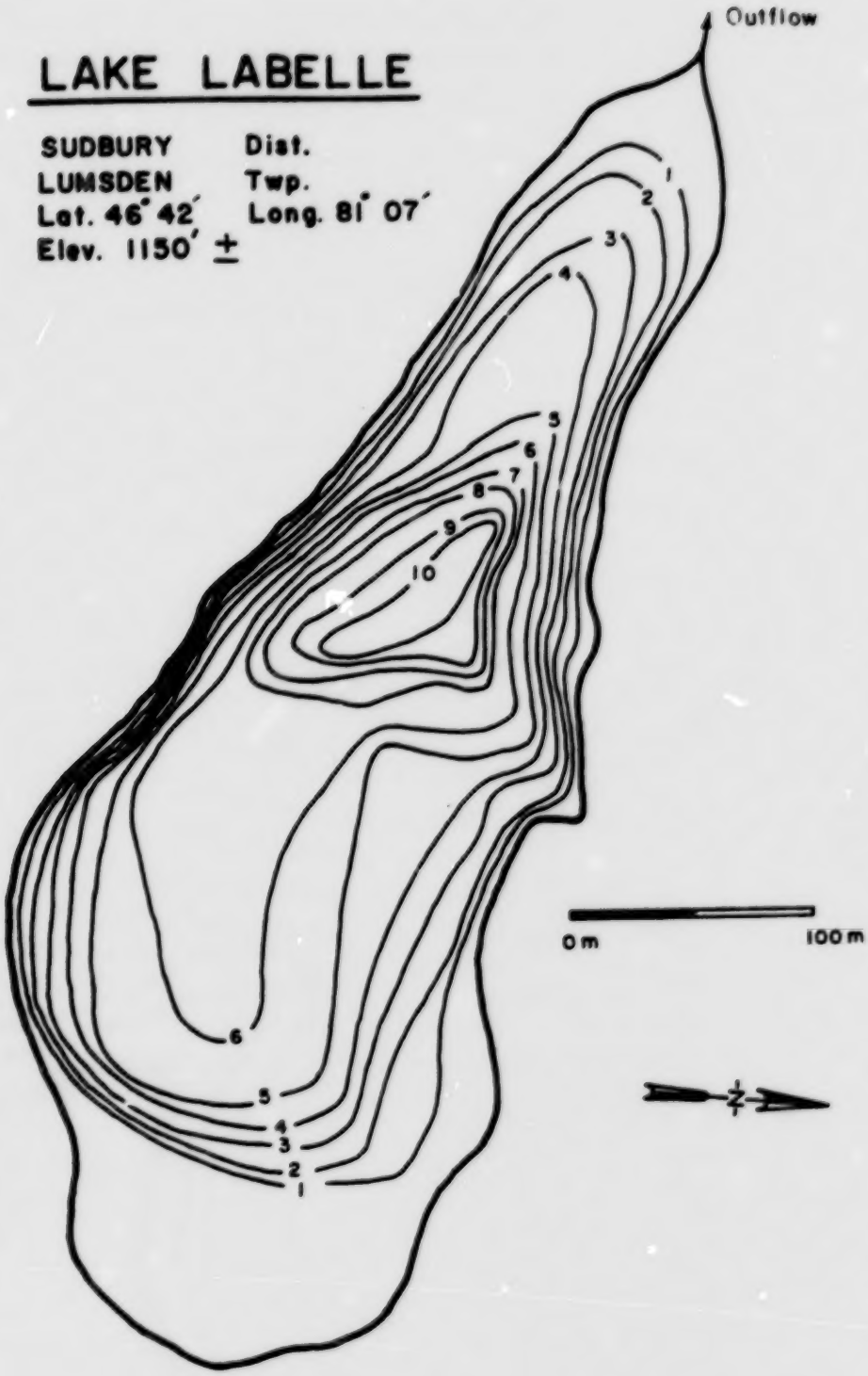
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	213	
		40.8
2	196	
		37.5
4	179	
		34.3
6	164	
		31.7
8	154	
		29.8
10	144	
		27.9
12	135	
		26.0
14	126	
		24.3
16	117	
		22.6
18	109	
		20.9
20	101	
		19.4
22	92.9	
		17.8
24	85.5	
		16.2
26	76.4	
		14.4
28	67.8	
		12.7
30	59.7	
		11.2

Kimball Lake Morphometry Summary (cont'd)

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
32	52.1	9.71
34	45.1	8.35
36	38.5	7.10
38	32.5	5.94
40	27.0	4.89
42	22.0	4.10
44	19.0	3.67
46	17.7	3.42
48	16.5	3.18
50	15.3	2.94
52	14.1	2.71
54	13.0	2.25
56	9.59	1.43
58	4.96	0.654
61	1.84	

LAKE LABELLE

SUDBURY Dist.
LUMSDEN Twp.
Lat. 46° 42′ Long. 81° 07′
Elev. 1150′ ±



Lake Labelle Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
6.16	2.36	3.84	10.2	1.32	1.50	1.18

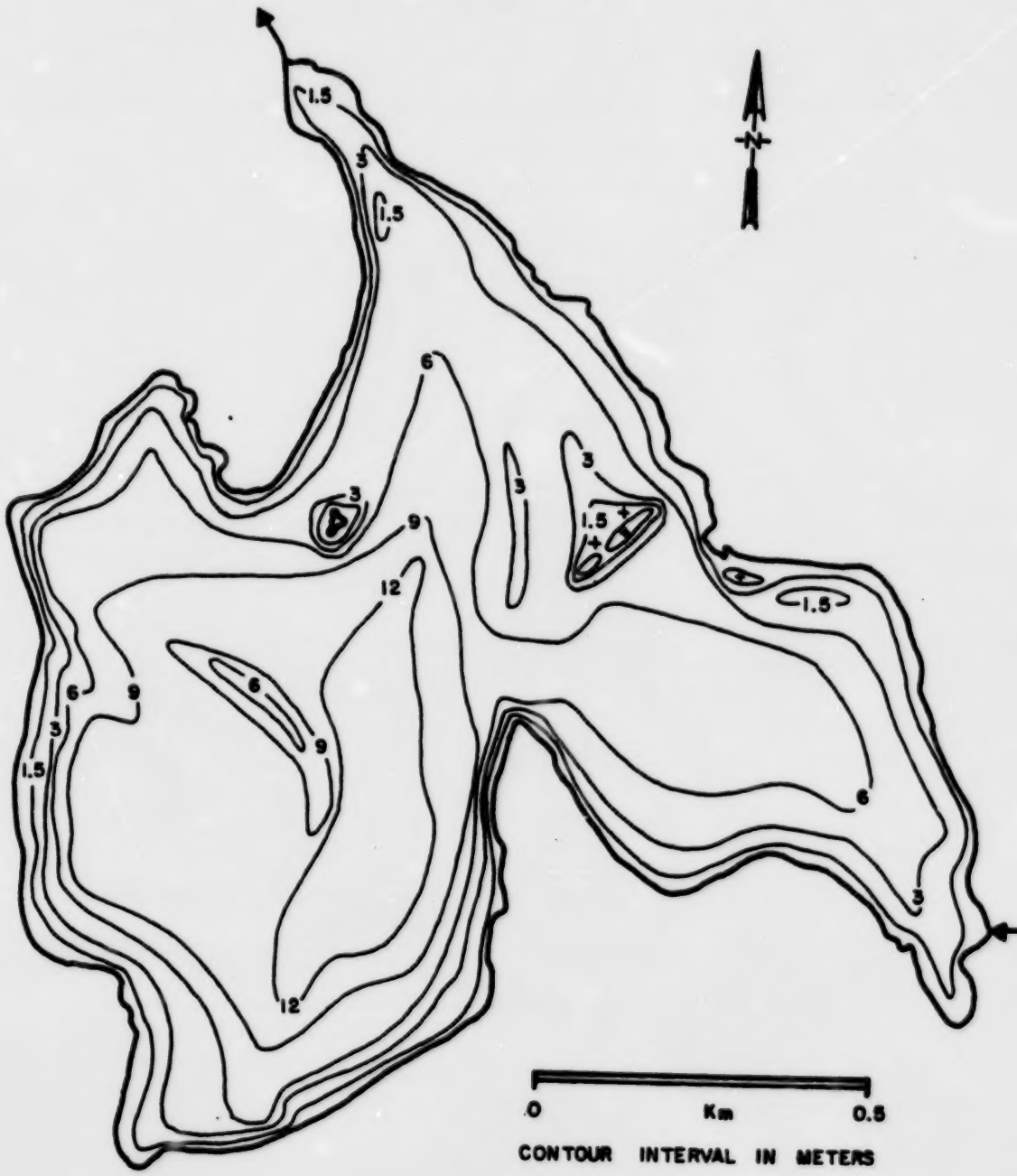
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	6.16	
		0.542
1	4.71	
		0.446
2	4.21	
		0.392
3	3.65	
		0.336
4	3.08	
		0.267
5	2.29	
		0.185
6	1.45	
		0.097
7	0.559	
		0.048
8	0.413	
		0.033
9	0.246	
		0.018
10	0.115	
		0.001
10.2	0.00	

LEECH LAKE

MUSKOKA Dist.

OAKLEY Tp.

Lat. 45° 03' Long. 79° 06'



Leech Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_V
82.0	51.9	6.3	13.7	5.70	1.78	1.38

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	82.0	
		15.6
2	70.5	
		12.6
4	55.5	
		9.69
6	41.7	
		6.97
8	28.4	
		4.48
10	16.2	
		2.15
12	6.17	
		0.366
13.7	0.00	

LEONARD LAKE

MUSKOKA Dist.

MONCK Tp.

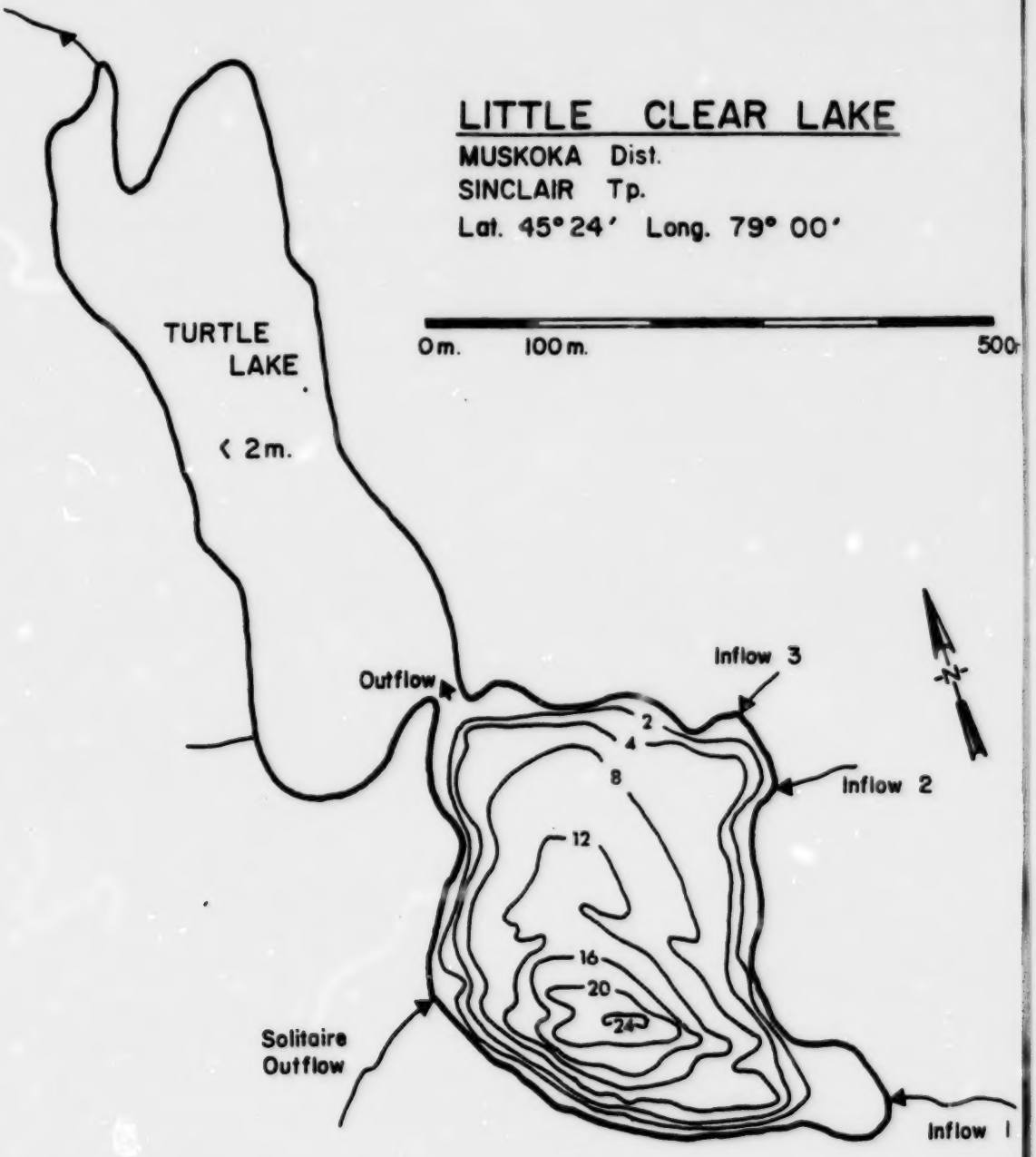
Lat. 45° 04′ Long. 79° 27′

CONTOUR INTERVAL IN METERS

Leonard Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V ($m^3 x 10^5$)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
195.	134.	6.9	15.2	14.0	2.83	1.36

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
0	195.	35.0
2	156.	28.2
4	126.	22.0
6	94.9	17.1
8	76.1	13.6
10	59.7	10.5
12	45.3	6.29
14	19.4	1.67
15.2	8.28	

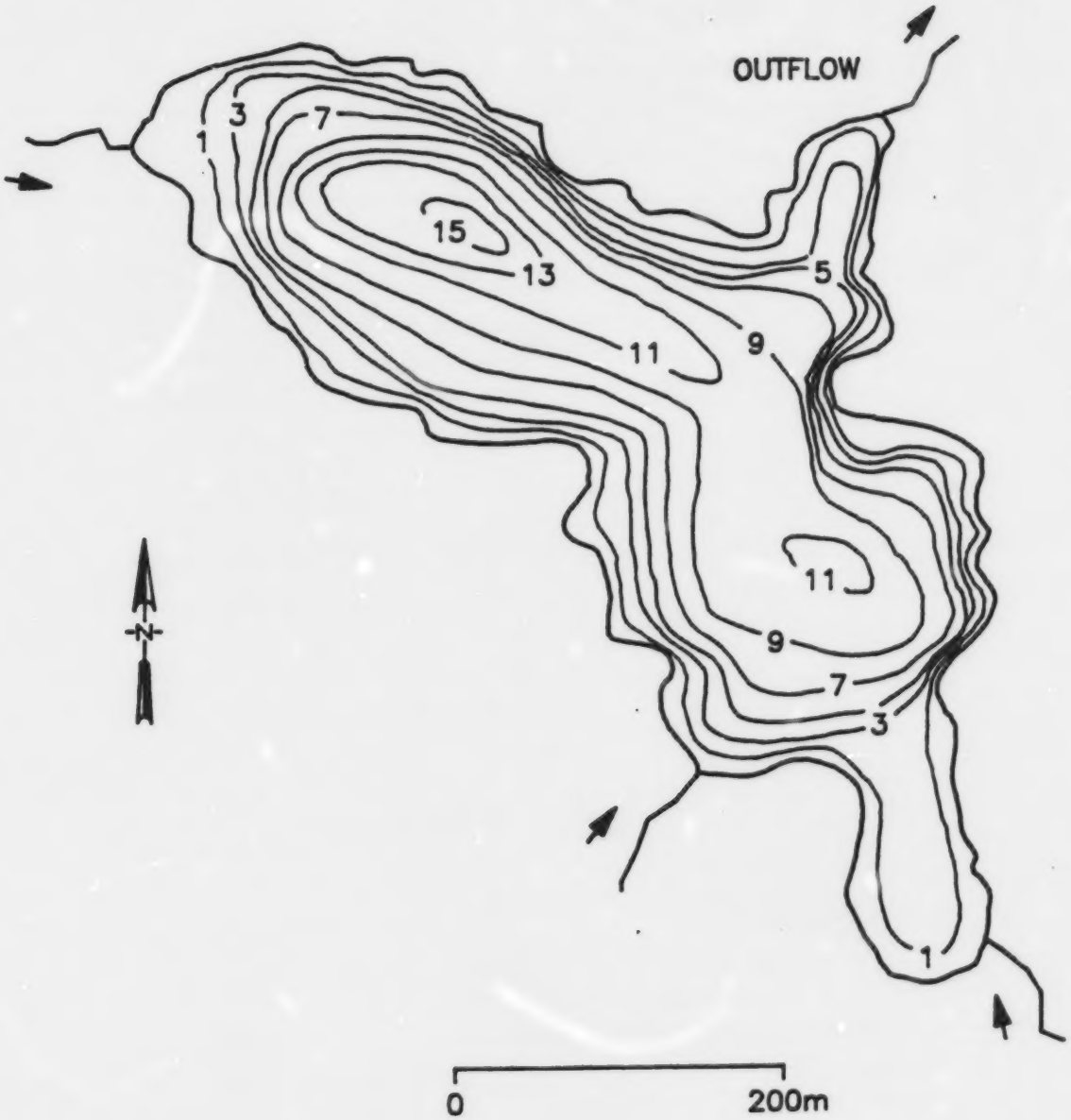

LITTLE CLEAR LAKE
MUSKOKA Dist.
SINCLAIR Tp.
Lat. 45° 24' Long. 79° 00'
0m.
100m.
500
TURTLE LAKE
< 2m.
Outflow
Inflow 3
Inflow 2
Inflow 1
Solitaire Outflow
2
4
8
12
16
20
24

Little Clear Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
10.9	8.86	8.1	25	1.48	1.26	0.97

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	10.9	
		1.99
2	8.99	
		1.69
4	7.97	
		1.45
6	6.51	
		1.19
8	5.39	
		0.905
10	3.71	
		0.613
12	2.46	
		0.395
14	1.52	
		0.254
16	1.04	
		0.175
18	0.72	
		0.116
20	0.448	
		0.064
22	0.208	
		0.020
24	0.024	
		0.001
25	0.00	

Little Eastend Lake



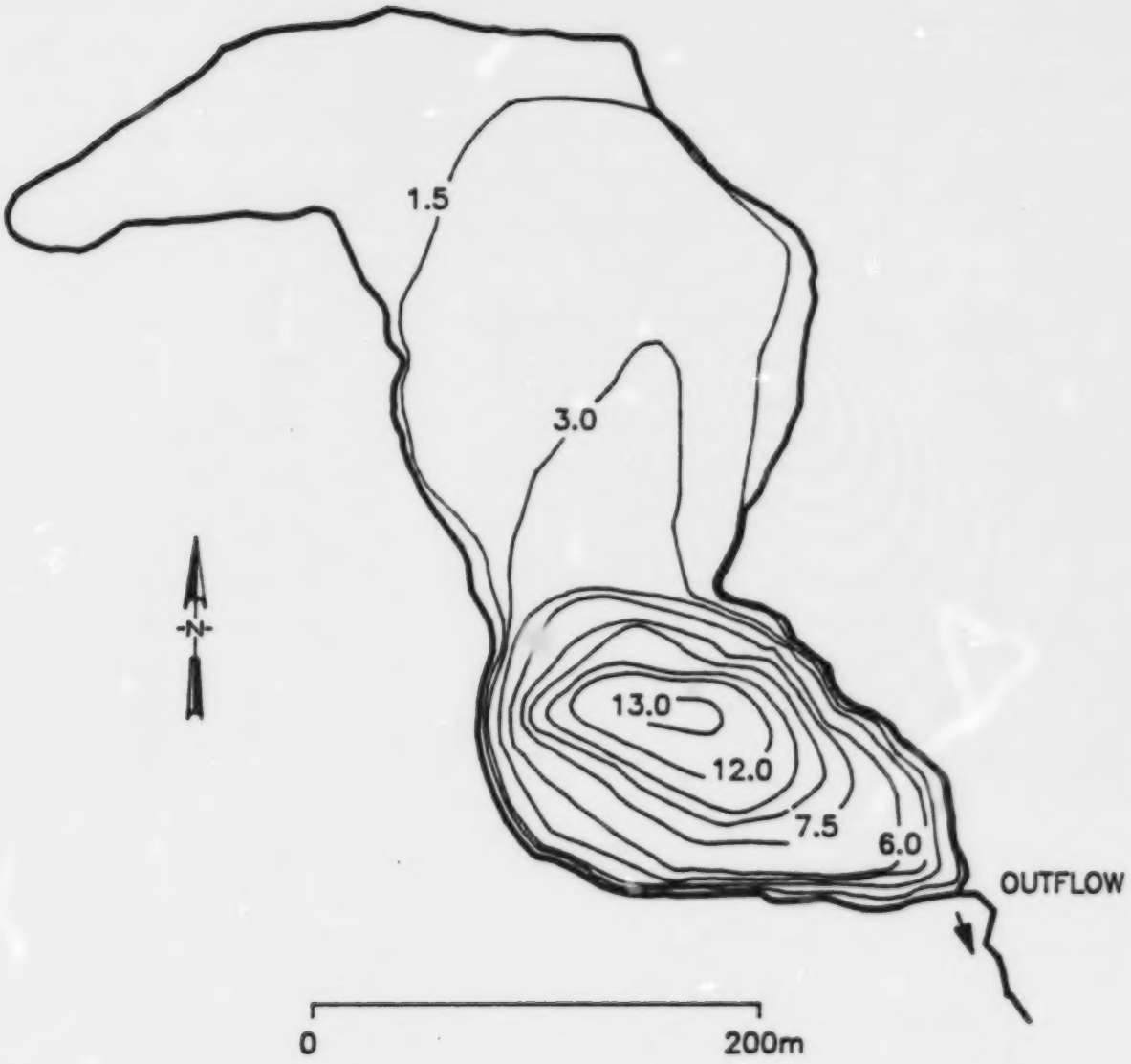
Nipissing Dist.
McCraney Co.
Lat.45°34' Long.78°57'

Little Eastend Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
11.67	7.05	6.04	15.5	2.12	1.75	1.17

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	11.67	
		1.99
2	8.74	
		1.58
4	7.23	
		1.32
6	5.95	
		1.05
8	4.40	
		0.69
10	2.33	
		0.29
12	0.89	
		0.12
14	0.26	
		0.02
15.5	0.00	

Little Whetstone Lake



Parry Sound Dist.
Proudfoot Tp.
Lat.45°42' Long79°08'

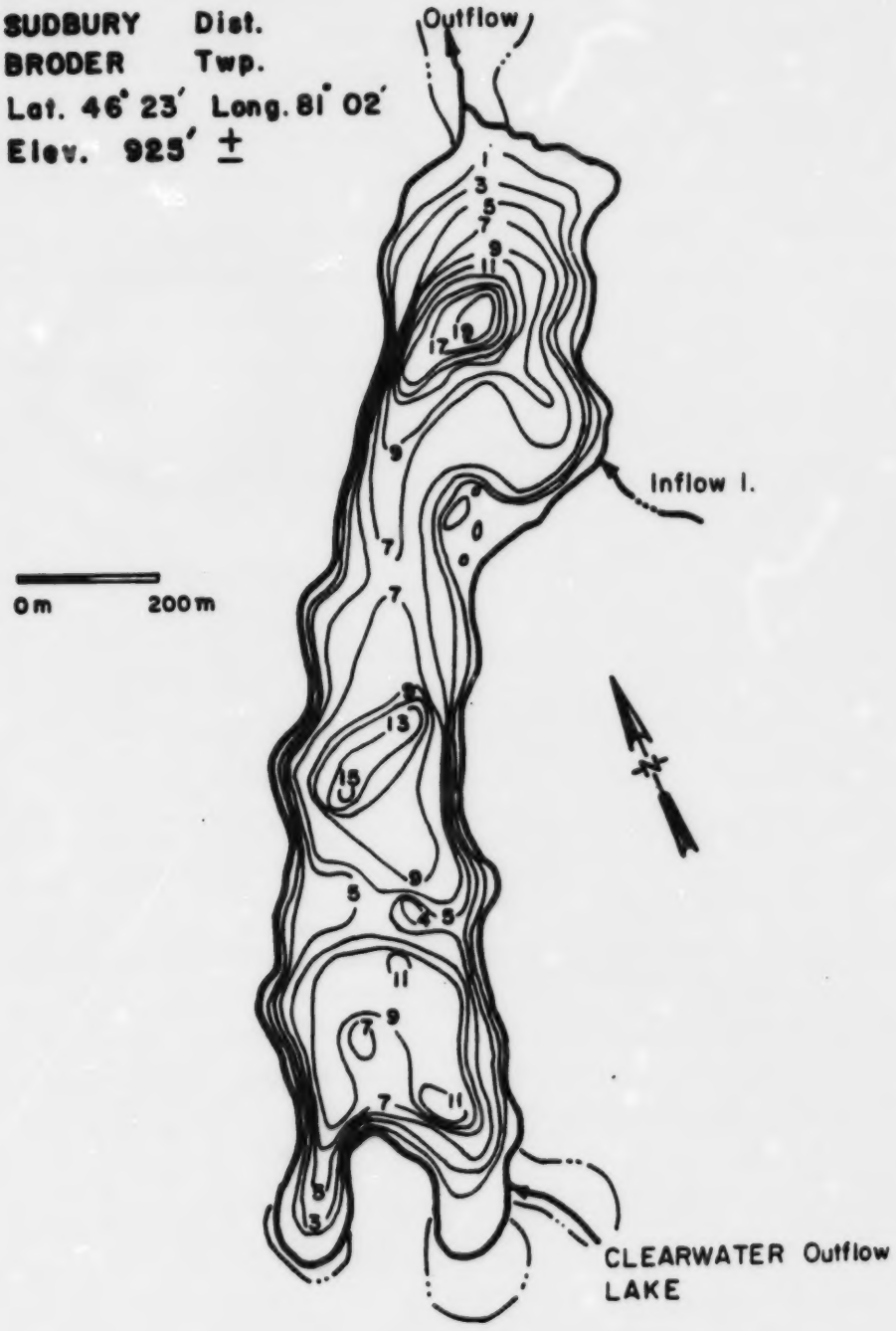
Little Whetstone Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
10.6	3.73	3.51	13.6	1.8	1.54	0.77

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	10.64	
		1.70
2	6.18	
		0.84
4	3.00	
		0.50
6	2.18	
		0.34
8	1.28	
		0.21
10	0.797	
		0.12
12	0.415	
		0.03
13.6	0.00	

LOHI LAKE

SUDBURY Dist.
BRODER Twp.
Lat. 46° 23′ Long. 81° 02′
Elev. 925′ ±

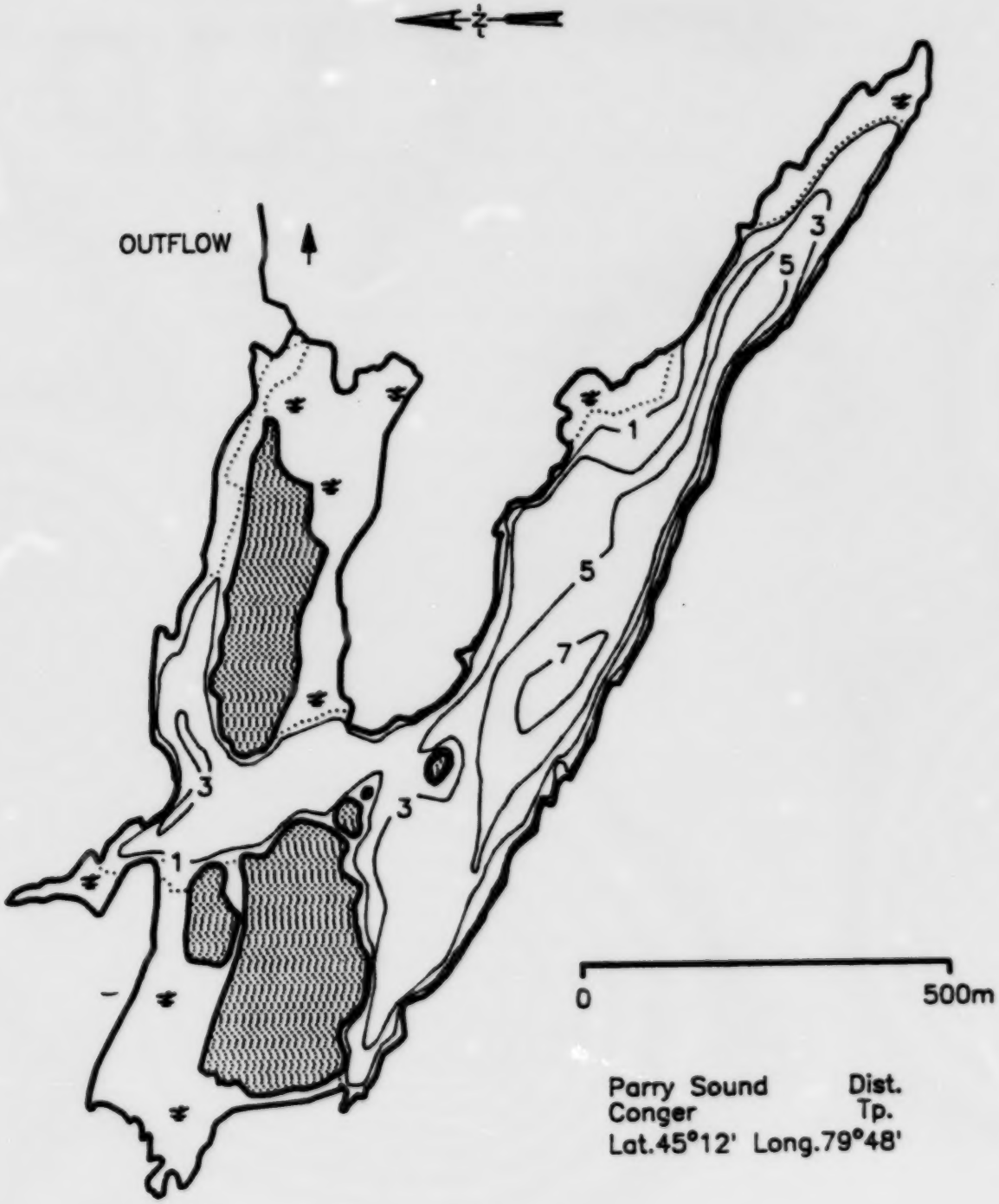


Lohi Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
40.5	25.0	6.2	19.5	4.47	1.98	0.95

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	40.5	
		3.72
1	34.0	
		6.43
3	30.3	
		5.51
5	24.8	
		4.17
7	17.1	
		2.66
9	9.86	
		1.34
11	4.00	
		0.619
13	2.27	
		0.334
15	1.13	
		0.170
17	0.598	
		0.081
19	0.239	
		0.004
19.5	0.00	

Louck's Lake



Parry Sound Dist.
Conger Tp.
Lat.45°12' Long.79°48'

Louck's Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
20.84	4.74	2.28	8.2	4.28	2.65	0.83

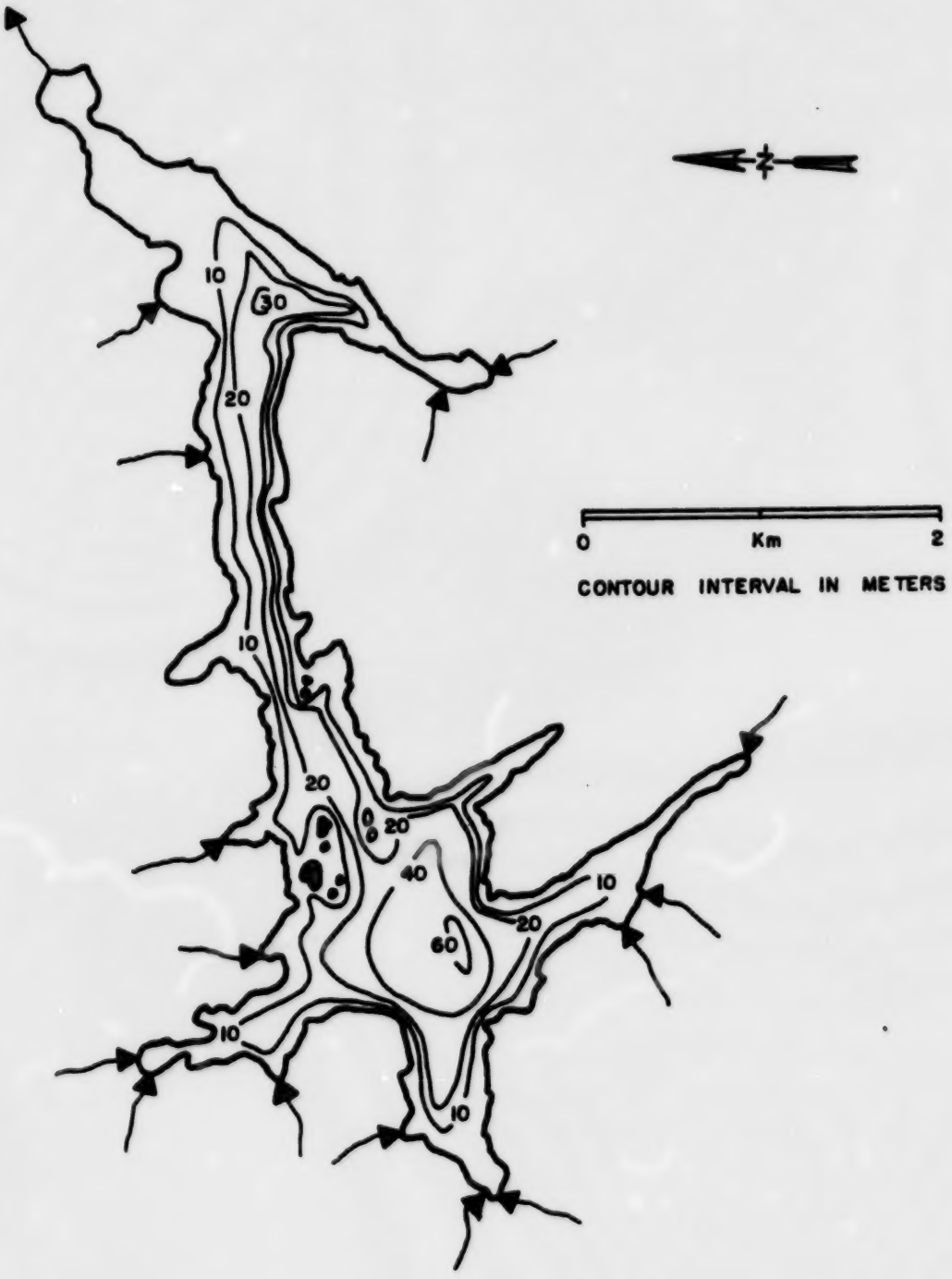
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	20.84	2.68
2	9.33	1.40
4	4.69	0.57
6	1.29	0.09
8.2	0.00	

LOUISA LAKE

HALIBURTON Co.

LAWRENCE Tp.

Lat. 45° 28' Long. 78° 29'



Lake Louisa Morphometry Summary

Lake Area A (ha)	Lake Volume V ($m^3 x 10^5$)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
531.	855.9	16.1	61.0	25.9	1.97	0.79

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
0	531	
		100.
2	469.	
		89.0
4	422.	
		79.4
6	372.	
		69.5
8	324.	
		60.9
10	285.	
		53.9
12	254.	
		48.6
14	232.	
		44.1
16	210.	
		39.8
18	188.	
		35.5
20	167.	
		31.4
22	146.	
		27.3
24	127.	
		23.6
26	109.	
		20.1
28	92.6	
		17.0
30	77.6	

Lake Louisa Morphometry Summary (cont'd)

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
		14.9
32	71.5	13.7
34	65.7	12.6
36	60.1	11.5
38	54.8	10.4
40	49.7	9.39
42	44.3	8.34
44	39.2	7.39
46	34.7	6.55
48	30.9	5.80
50	27.2	4.91
52	22.0	3.94
54	17.4	2.99
56	12.6	2.04
58	7.97	1.22
61	4.39	

Maggie Lake
OUTFLOW
Sampling Location
0
500m
Nipissing Dist.
Finlayson Tp.
Lat.45°30' Long.78°52'

Maggie Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
138.60	141.00	10.17	31.0	11.55	2.77	0.98

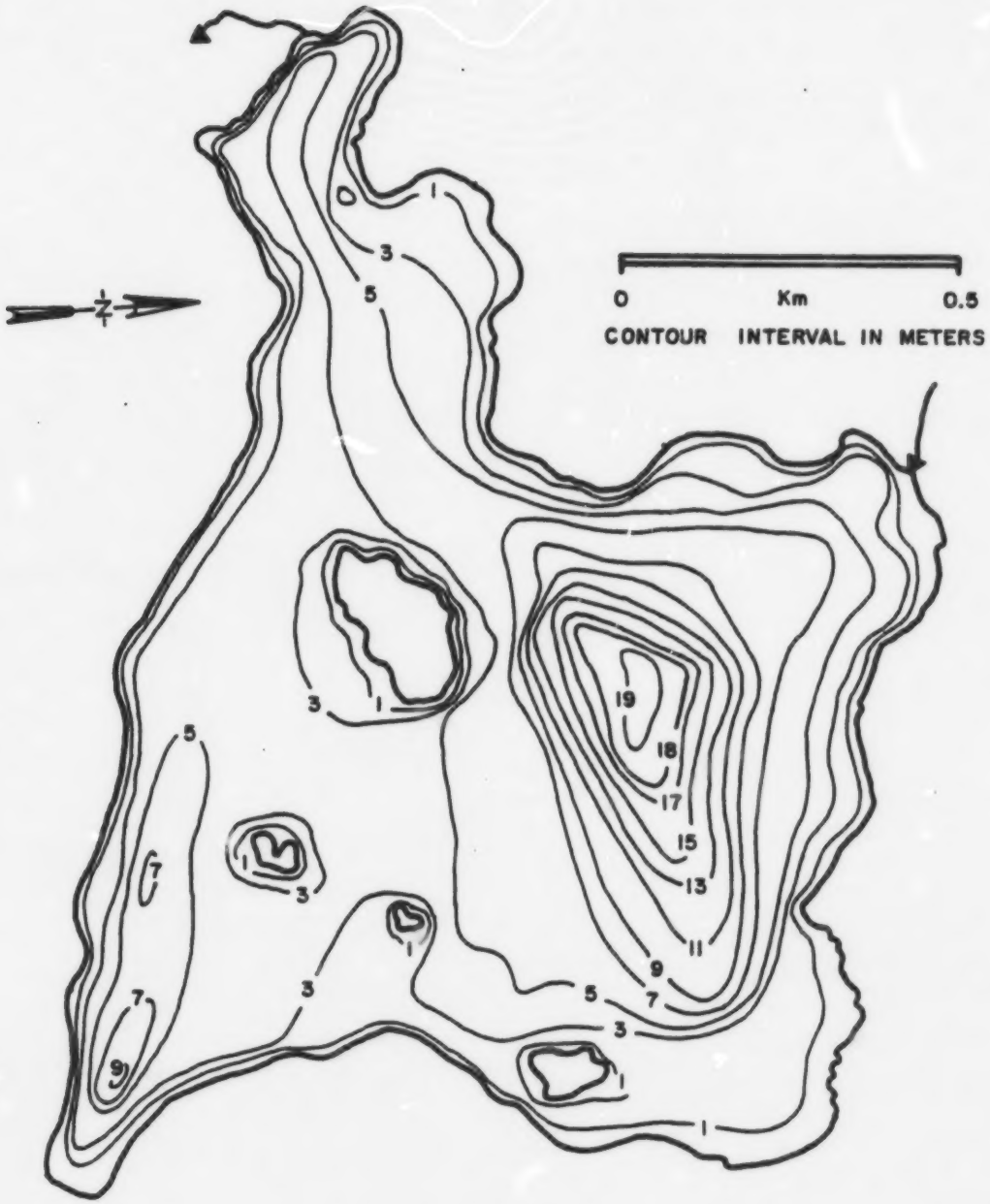
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	138.60	
		25.58
2	120.20	
		22.73
4	106.30	
		19.76
6	91.40	
		16.79
8	75.94	
		13.66
10	61.42	
		11.07
12	49.81	
		8.91
14	38.99	
		6.79
16	29.62	
		5.20
18	22.71	
		3.96
20	17.00	
		2.91
22	12.37	
		2.04
24	7.54	
		1.05
26	3.36	
		0.42
28	1.18	
		0.12
30	0.14	
		0.01
31	0.00	

McKAY LAKE

MUSKOKA Dist.

DRAPER Tp.

Lat. 45° 03' Long. 79° 10'



McKay Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V ($m^3 x 10^5$)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_V
121.5	63.5	5.2	19.5	7.66	1.96	0.800

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
0	121.5	
		22.2
2	99.6	
		17.1
4	67.2	
		10.0
6	35.7	
		5.21
8	20.0	
		3.26
10	13.5	
		2.27
12	9.52	
		1.61
14	6.70	
		1.11
16	4.42	
		0.642
18	1.70	
		0.119
19.5	0.00	

HANNAH LAKE
Outflow
Outflow
N
1
3
5
7
9
11
13
14
14
13
11
9
4
9
7
5
3
1
Inflow 1.
Inflow 2.
MIDDLE LAKE
SUDBURY Dist.
BRODER Twp.
Lat. 46° 26′ Long. 81° 02′
Elev. 925′ ±
0m
200 m

Middle Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
28.2	17.5	6.2	15.0	3.2	1.70	1.24

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	28.2	2.64
1	24.7	4.54
3	20.8	3.64
5	15.7	2.67
7	11.2	1.80
9	6.94	1.18
11	4.88	0.844
13	3.59	0.202
14	0.786	0.026
15	0.000	

MOOT LAKE

MUSKOKA Dist.

MCLEAN Tp.

Lat. 45° 09' Long. 79° 10'

CONTOUR INTERVAL IN METERS

Moot Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
46.2	12.4	2.7	7.90	4.00	1.66	1.02

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	46.2	7.36
2	25.5	3.50
4	11.1	1.33
6	3.05	0.197
7.9	0.00	

MOUNTAINTOP LAKE

SUDBURY Dist.
FRALECK Twp.
Lat. 46° 55′ Long. 80° 53′
Elev. 1205′ ±

Mountaintop Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
4.9	2.11	4.3	9.5	1.03	1.31	1.36

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	4.90	
		0.483
1	4.76	
		0.729
3	2.63	
		0.445
5	1.84	
		0.298
7	1.16	
		0.150
9	0.404	
		0.007
9.5	0.000	

NELSON LAKE

SUDBURY Dist.
BOWELL Twp.
Lat. 46° 44′ Long. 81° 05′
Elev. 1153′ ±

Nelson Lake Morphometry Summary

	Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Develop-ment of Shoreline D_L	Develop-ment of Volume D_v
Whole Lake	309.0	359.0	11.6	51	33.3	5.35	0.68
Main Basin	274.0	331.0	12.0	51			0.71
N.W. Basin	34.6	28.0	8.0	31			0.78

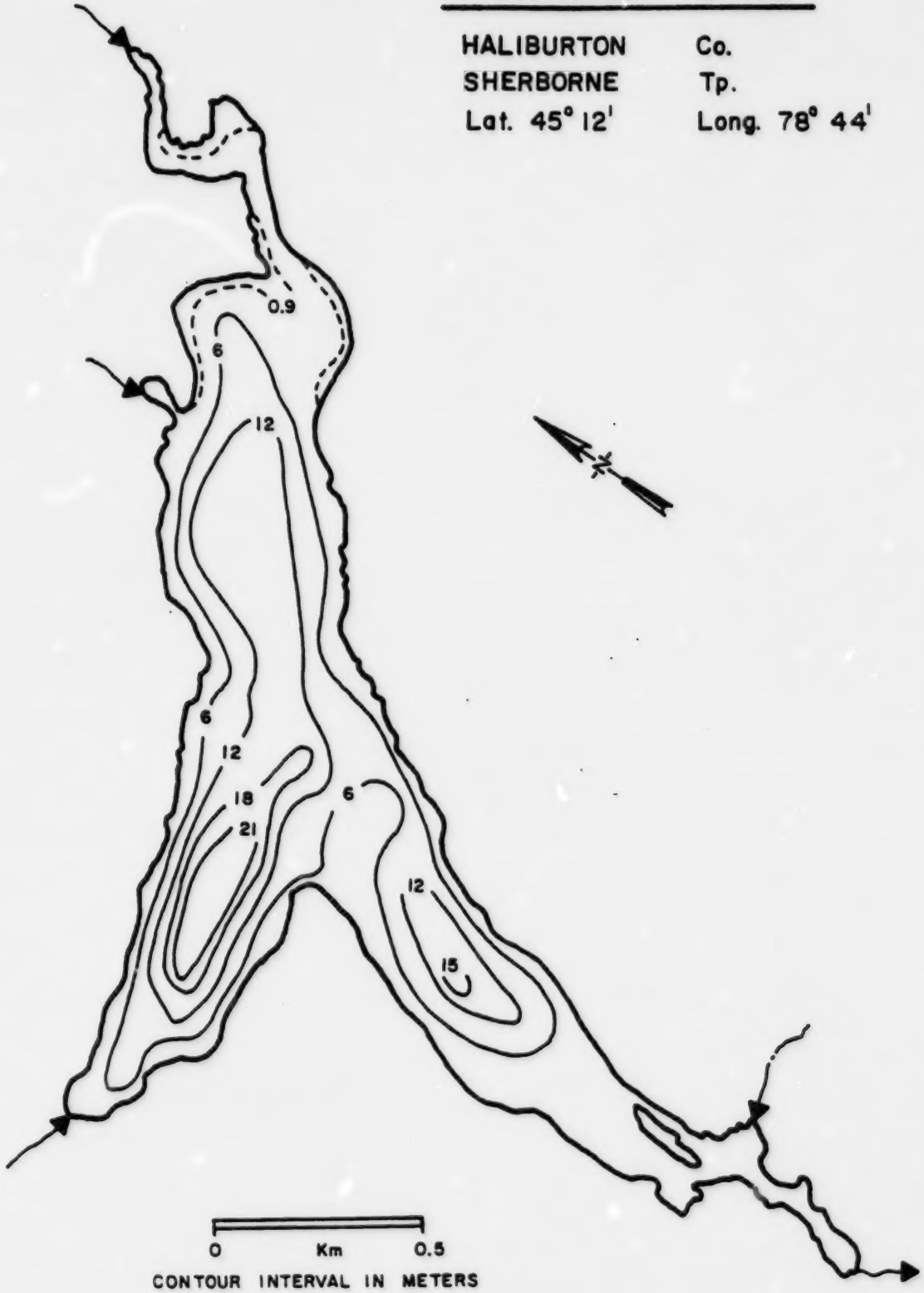
Whole Lake			Main Basin			N.W. Basin		
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	309.0		0	274.0		0	34.6	
		56.0			50.4			5.65
2	253.0		2	230.0		2	22.3	
		47.3			43.2			4.08
4	221.0		4	202.0		4	18.5	
		41.8			38.4			3.41
6	197.0		6	181.0		6	15.6	
		36.7			33.9			2.78
8	171.0		8	158.0		8	12.2	
		31.8			29.6			2.27
10	148.0		10	138.0		10	10.4	
		27.1			25.2			1.93
12	123.0		12	114.0		12	8.87	
		22.6			20.9			1.67
14	103.0		14	95.3		14	7.82	
		18.6			17.2			1.48
16	83.7		16	76.7		16	6.98	
		14.9			13.6			1.30
18	66.0		18	59.9		18	6.05	
		11.8			10.7			1.08
20	52.2		20	47.4		20	4.81	
		9.63			8.76			0.87
22	44.2		22	40.3		22	3.92	
		7.66			7.01			0.66
24	32.7		24	30.0		24	2.70	
		5.88			5.43			0.44

Nelson Lake Morphometry Summary (cont'd)

Whole Lake			Main Basin			N.W. Basin		
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
26	26.2	4.90	26	24.4	4.63	26	1.76	0.27
28	22.8	4.23	28	21.9	4.13	28	0.93	0.09
30	19.5	3.70	30	19.4	3.69	30	0.08	0.003
32	17.5	3.12	32	17.5	3.12	31	0.00	
34	13.8	2.50	34	13.8	2.50			
36	11.3	2.12	36	11.3	2.12			
38	9.92	1.82	38	9.92	1.82			
40	8.29	1.54	40	8.29	1.54			
42	7.08	1.30	42	7.08	1.30			
44	5.92	1.01	44	5.92	1.01			
46	4.22	0.67	46	4.22	0.67			
48	2.58	0.38	48	2.58	0.38			
50	1.29	0.04	50	1.29	0.04			

NUNIKANI LAKE

HALIBURTON Co.
SHERBORNE Tp.
Lat. 45° 12' Long. 78° 44'



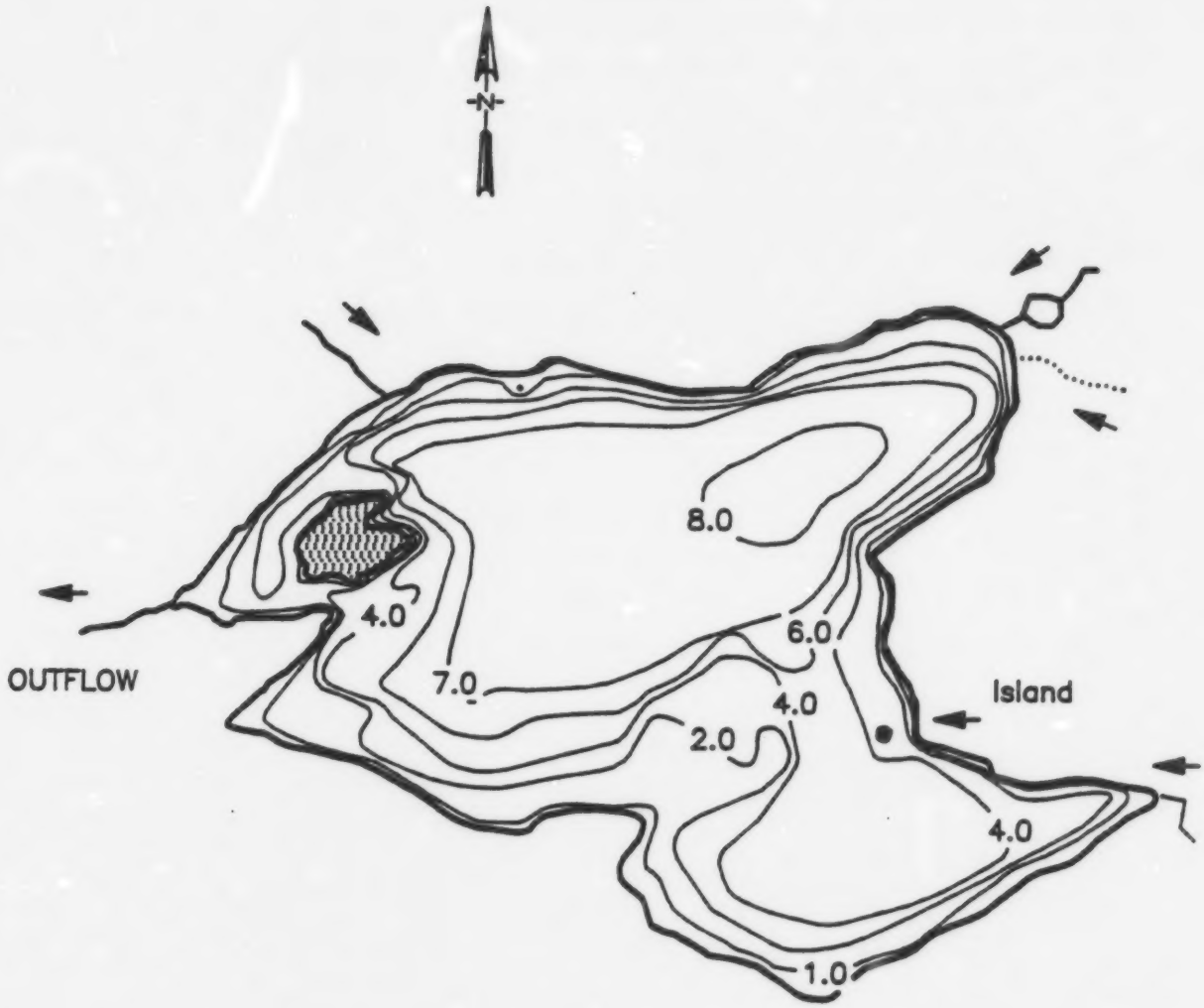
CONTOUR INTERVAL IN METERS

Nunikani (Crab) Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
116.	91.7	7.9	24.0	9.76	2.56	0.99

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	116.	
		20.6
2	90.9	
		16.3
4	72.0	
		12.7
6	55.3	
		10.5
8	49.8	
		9.23
10	42.5	
		7.46
12	32.3	
		5.64
14	24.3	
		4.02
16	16.2	
		2.37
18	7.98	
		1.28
20	4.93	
		0.680
22	2.07	
		0.138
24	0.00	

Pearceley Lake

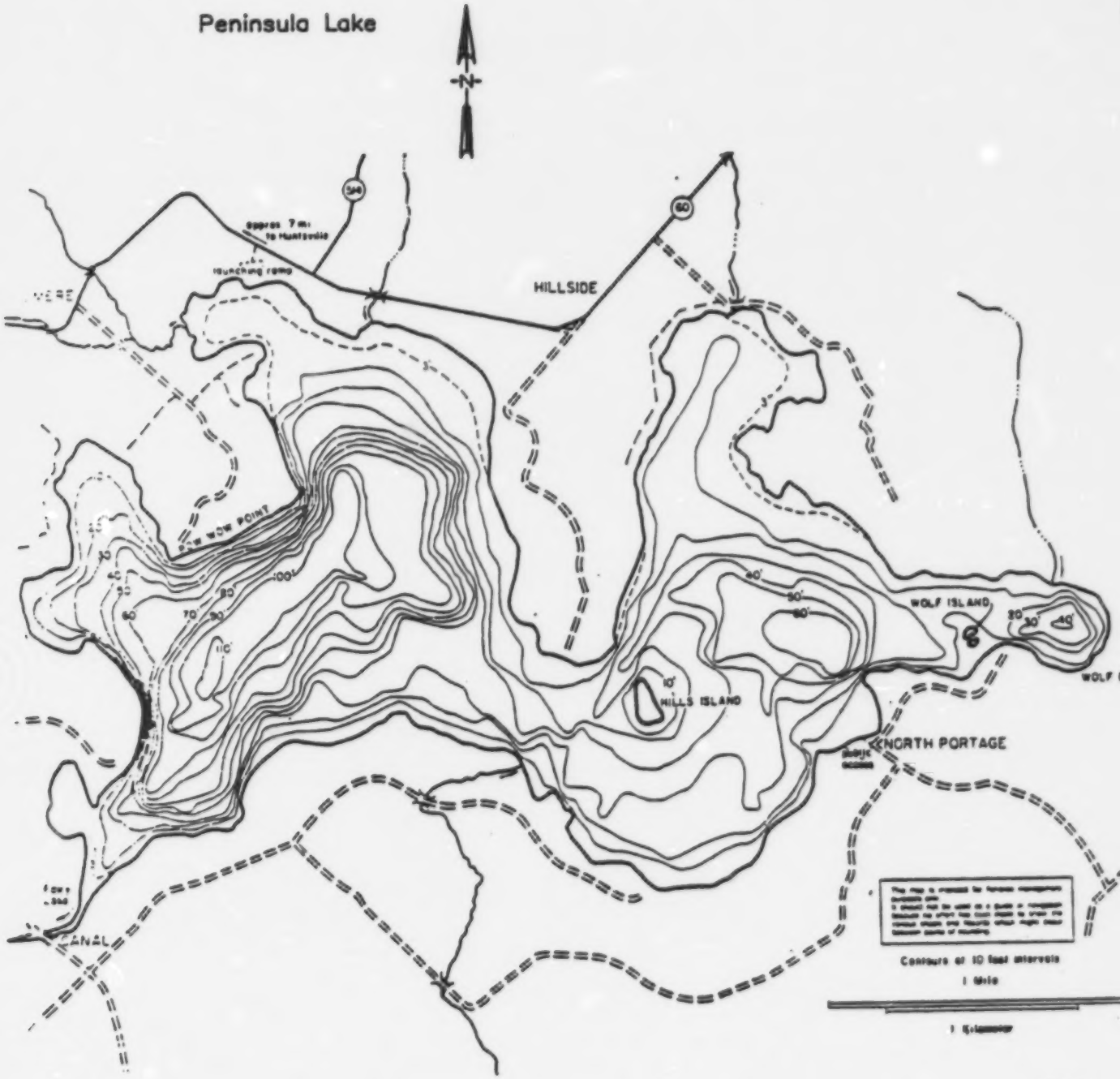


Parry Sound Dist.
Chapman Tp.
Lat.45°42' Long.79°30'

Pearceley Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
44.14	20.82	4.72	8.1	3.1	1.32	1.75

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	44.14	8.03
2	34.68	6.15
4	26.95	4.44
6	17.73	2.21
8.1	0.00	



Muskoka District
Chaffey & Franklin Tp.
Lat.45°20' Long.79°06'

Peninsula Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
822.9	818.3	9.94	34.14	25.86	2.54	0.87

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	822.9	149.3
2	672.3	121.7
4	557.9	103.2
6	475.3	86.2
8	387.6	69.47
10	309.1	54.80
12	240.3	44.79
14	211.1	39.71
16	185.1	34.26
18	157.9	28.94
20	131.7	23.99
22	110.0	20.40
24	94.18	16.44
26	68.63	11.34
28	46.93	7.978
30	33.24	4.696
32	12.68	1.121
34	0.00	

Pincher Lake

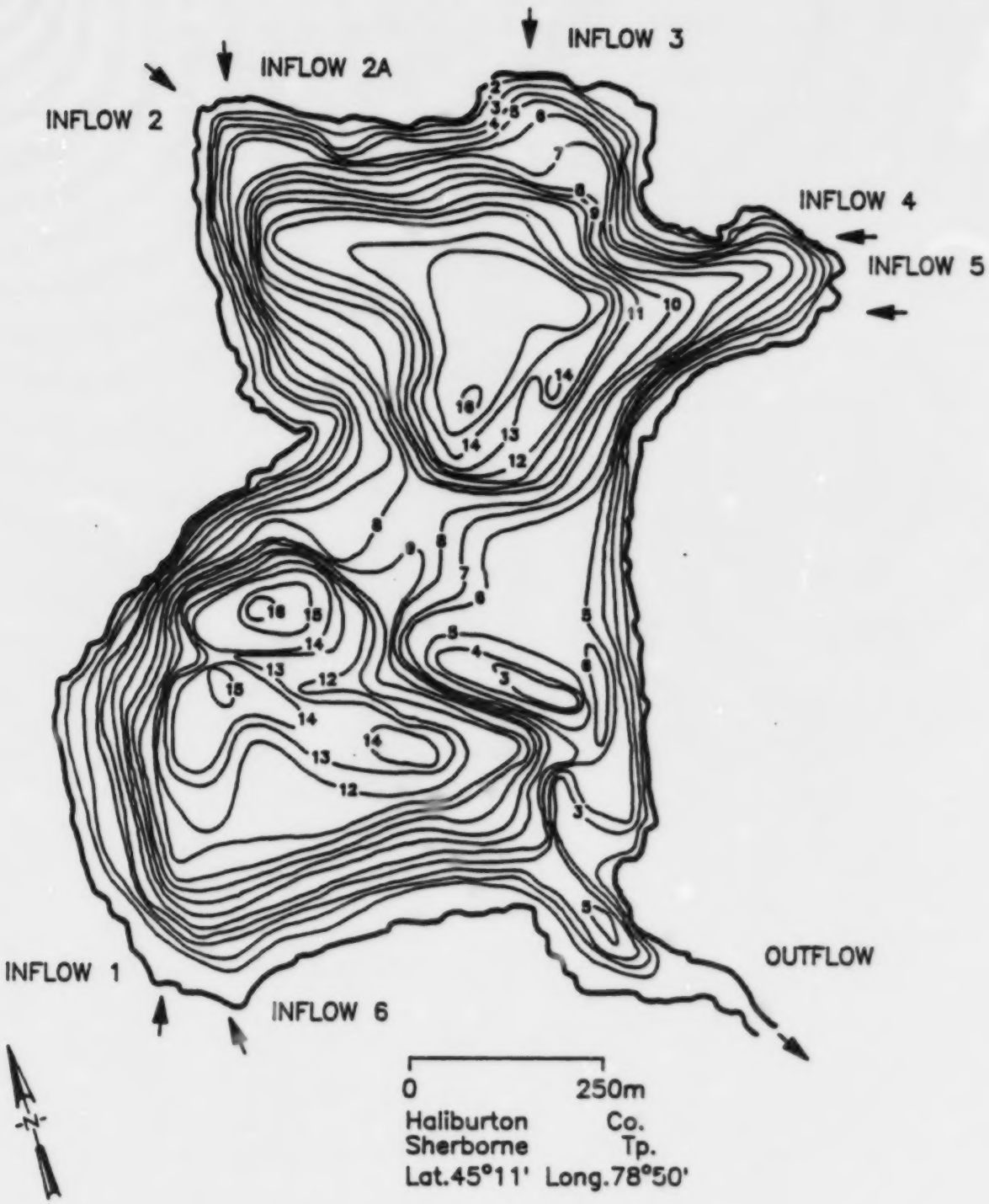
Nipissing Dist.
McCraney Tp.
Lat.45°34' Long.78°51'

Pincher Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
42.06	25.48	6.06	15.5	5.52	2.40	1.17

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	42.06	7.44
2	33.39	6.01
4	26.38	4.54
6	19.87	3.11
8	12.47	2.01
10	8.31	1.39
12	5.57	0.82
14	2.22	0.16
15.5	0.00	

Plastic Lake



Plastic Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
32.14	25.24	7.9	16.3	3.14	1.56	1.50

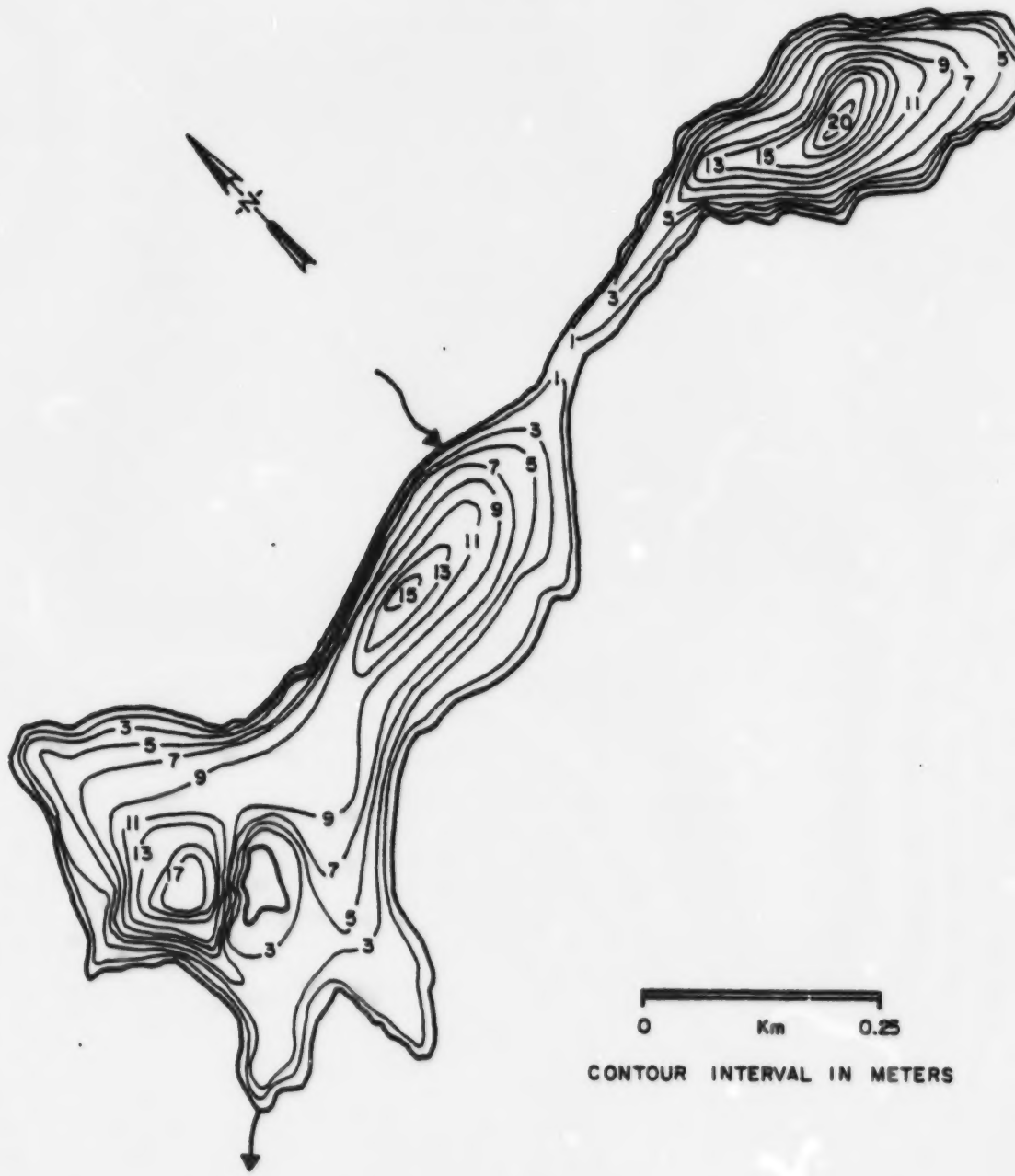
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	32.14	
		6.11
2	28.97	
		5.37
4	24.84	
		4.47
6	19.65	
		3.46
8	14.95	
		2.60
10	11.23	
		1.88
12	7.29	
		1.06
14	3.35	
		0.297
16.3	0.00	

POKER LAKE

HALIBURTON Co.

HINDON Tp.

Lat. 45° 03' Long. 78° 56'

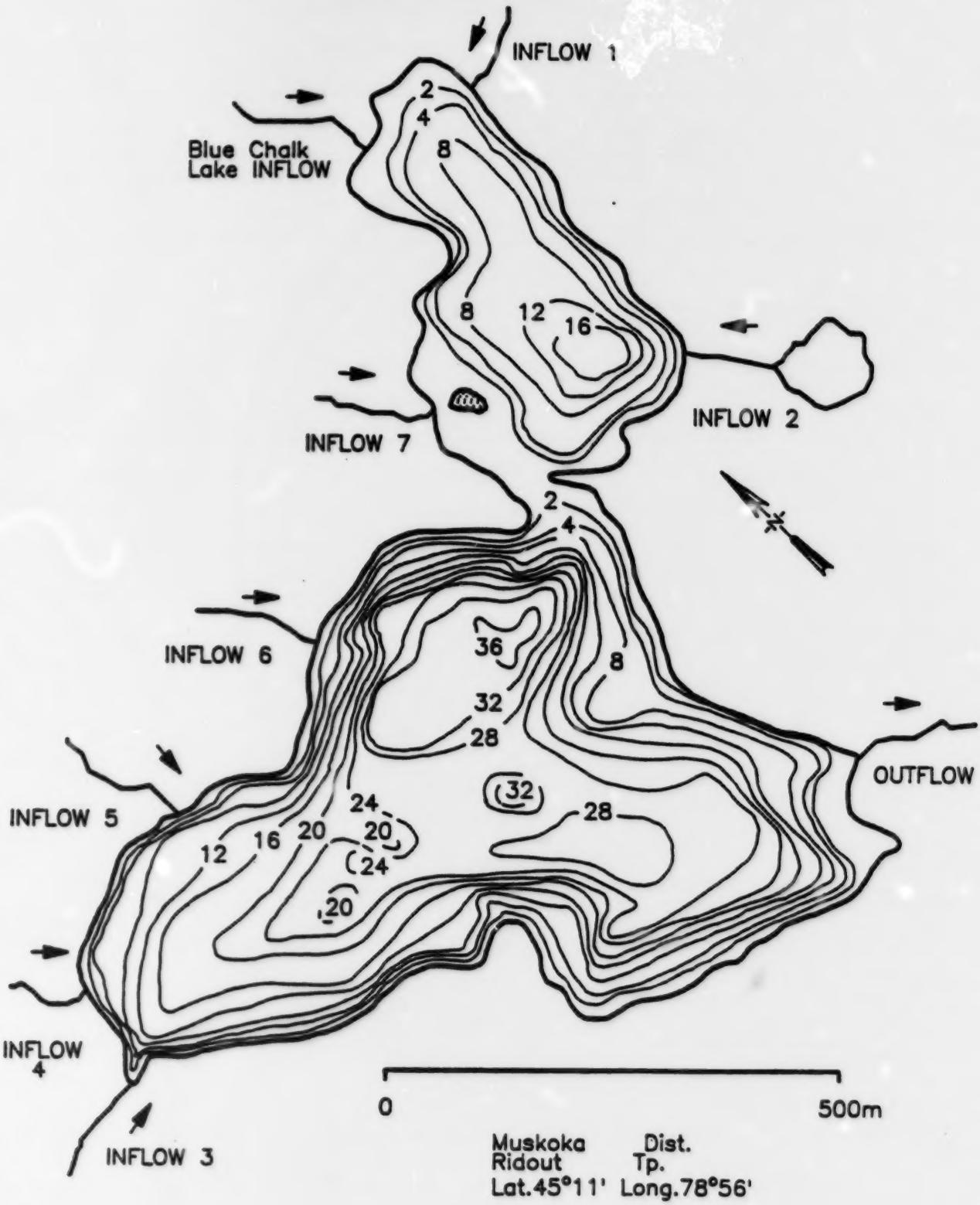


Poker Lake Morphometry Summary

	Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
Whole Lake	20.8	13.3	6.4	20.5	3.83	2.37	0.94
East Basin (PRE)	5.42	3.72	6.9	20.5	1.38	1.67	1.00
Main Basin (PR)	15.3	9.61	6.3	17.5	2.45	1.77	1.07

Whole Lake			Main Basin (PR)			East Basin (PRE)		
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	20.8		0	15.3		0	5.42	
		3.80			2.82			0.984
2	17.1		2	12.6		2	4.49	
		3.04			2.23			0.813
4	13.3		4	9.72		4	3.56	
		2.31			1.70			0.613
6	10.0		6	7.42		6	2.62	
		1.73			1.29			0.447
8	7.21		8	5.33		8	1.88	
		1.16			0.842			0.314
10	4.26		10	2.96		10	1.29	
		0.619			0.404			0.214
12	2.33		12	1.44		12	0.888	
		0.361			0.213			0.148
14	1.32		14	0.712		14	0.603	
		0.191			0.094			0.097
16	0.686		16	0.305		16	0.380	
		0.098			0.028			0.059
18	0.298		17.5	0.00		18	0.217	
		0.031						0.027
20	0.043					20	0.043	
		0.001						0.001
20.5	0.00					20.5	0.00	

Red Chalk Lake



Muskoka Dist.
Ridout Tp.
Lat.45°11' Long.78°56'

Red Chalk Lake Morphometry Summary

	Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Develop-ment of Shoreline D_L	Develop-ment of Volume D_v
Whole Lake	57.13	81.10	14.2	38	4.97	1.85	1.12
Main Basin	44.08	73.52	16.7	38	3.24	1.37	1.32
East Basin	13.05	7.48	5.7	19	1.72	1.34	0.90

Whole Lake			Main Basin			East Basin		
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)	Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	57.13		0	44.08		0	13.05	
		10.59			8.40			2.18
2	48.85		2	39.97		2	8.88	
		9.37			7.76			1.61
4	44.87		4	37.60		4	7.27	
		8.56			7.27			1.28
6	40.75		6	35.11		6	5.59	
		7.75			6.78			0.97
8	36.83		8	32.70		6	4.12	
		6.96			6.29			0.66
10	32.85		10	30.21		10	2.50	
		6.19			5.80			0.37
12	29.10		12	27.81		12	1.30	
		5.56			5.34			0.20
14	26.51		14	25.63		14	0.76	
		5.05			4.92			0.13
16	24.05		16	23.54		16	0.51	
		4.52			4.45			0.07
18	21.17		18	20.94		18	0.25	
		3.96			3.94			0.01
20	18.49		20	18.49		19	0.0	
		3.46			3.46			
22	16.10		22	16.10				
		2.99			2.99			
24	13.87		24	13.87				
		2.31			2.31			
26	9.38		26	9.38				
		1.50			1.50			

Red Chalk Lake Morphometry Summary (cont'd)

Whole Lake			Main Basin			East Basin
28	5.77		28	5.77		
		1.00			1.00	
30	4.28		30	4.28		
		0.73			0.73	
32	3.02		32	3.02		
		0.42			0.42	
34	1.32		34	1.32		
		0.15			0.15	
36	0.32		36	0.32		
		0.02			0.02	
38	0.00		38	0.00		

RED PINE LAKE

HALIBURTON Co.

SHERBORNE Tp.

Lat. 45° 12′ Long. 78° 42′

Red Pine Lake Morphometry Summary

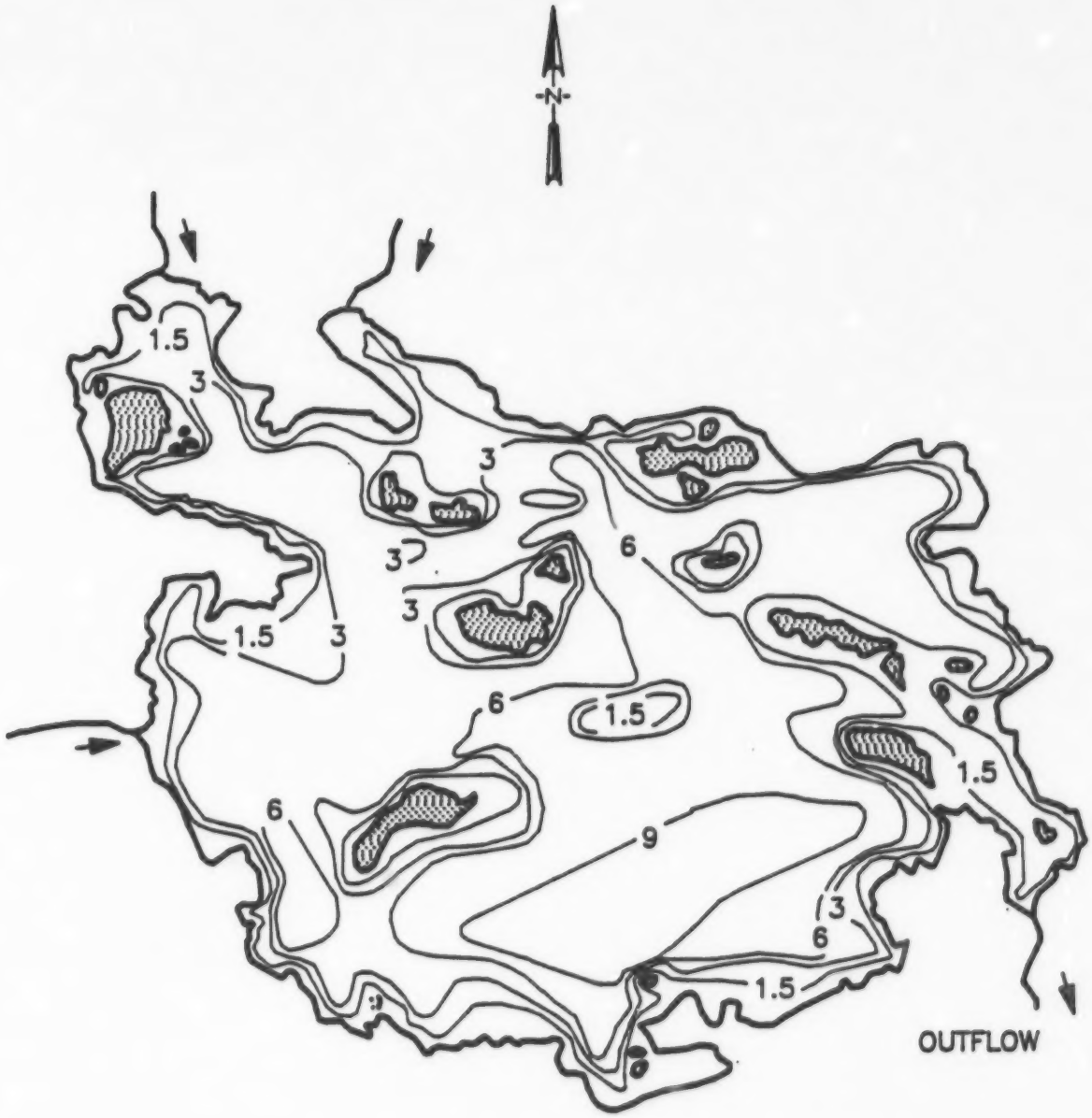
Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
365.	367.	10.1	38.7	19.7	2.91	0.780

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	365.	
		66.0
2	297.	
		53.9
4	243.	
		44.4
6	201.	
		36.9
8	168.	
		30.6
10	138.	
		24.9
12	111.	
		20.7
14	96.3	
		18.0
16	83.5	
		15.5
18	71.5	
		13.3
20	61.1	
		11.3
22	51.7	
		9.46
24	43.0	
		7.55
26	32.7	
		5.56
28	23.2	
		3.83
30	15.3	
		2.57

Red Pine Lake Morphometry Summary (cont'd)

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
32	10.5	1.74
34	6.97	1.10
36	4.15	0.386
38	0.384	0.009
38.7	0.00	

Round Lake



0 500m

Parry Sound Dist.
Ferguson & Burpee Tp.
Lat.45°31' Long.80°08'

Round Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V ($m^3 x 10^5$)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
226.0	99.08	4.38	11.6	11.87	2.23	1.13

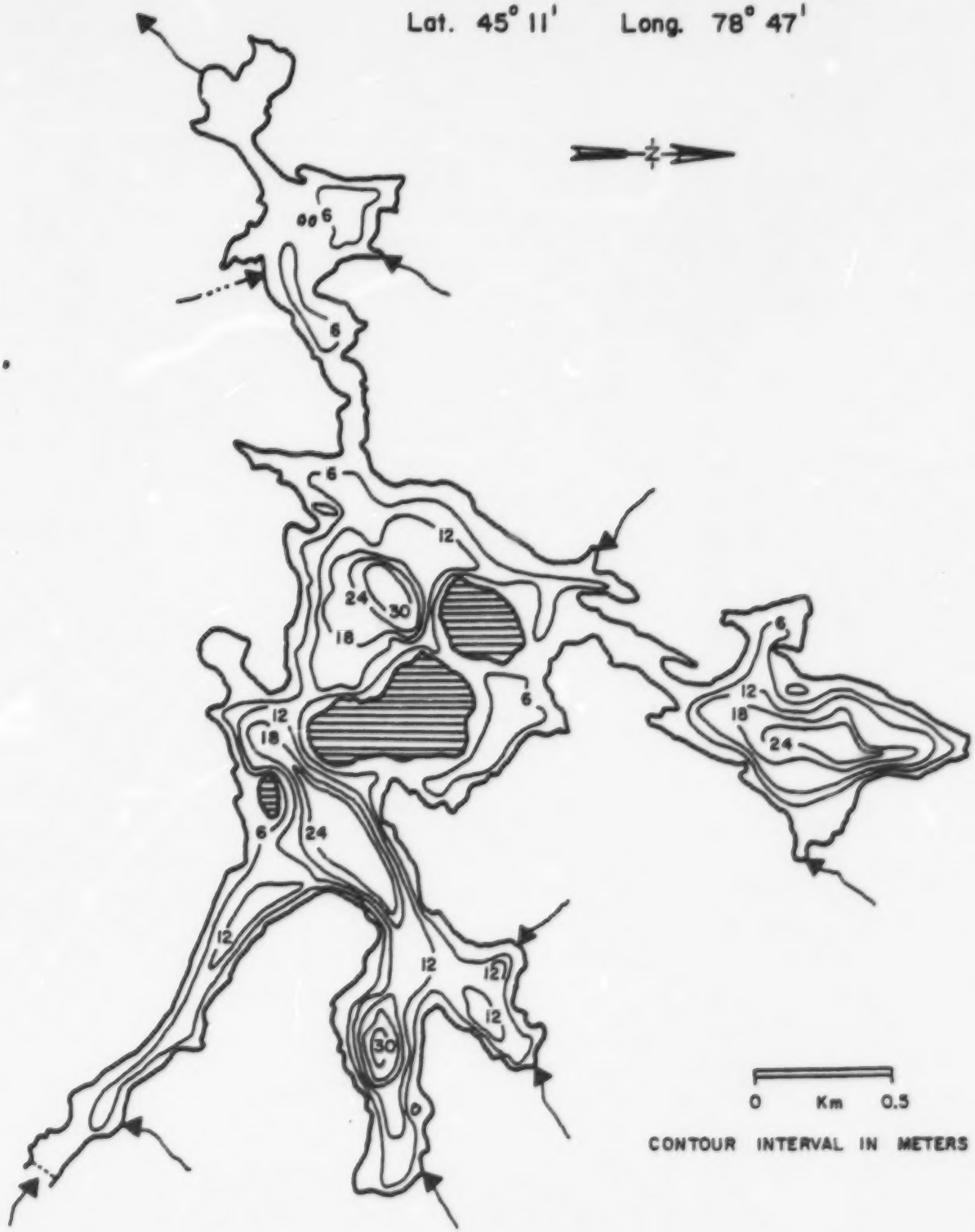
Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
0	226.00	39.01
2	166.80	28.31
4	114.60	17.99
6	67.32	9.66
8	31.46	3.73
10	7.15	0.38
11.6	0.00	

SHERBORNE LAKE

HALIBURTON Co.

SHERBORNE and STANHOPE Tps.

Lat. 45° 11' Long. 78° 47'

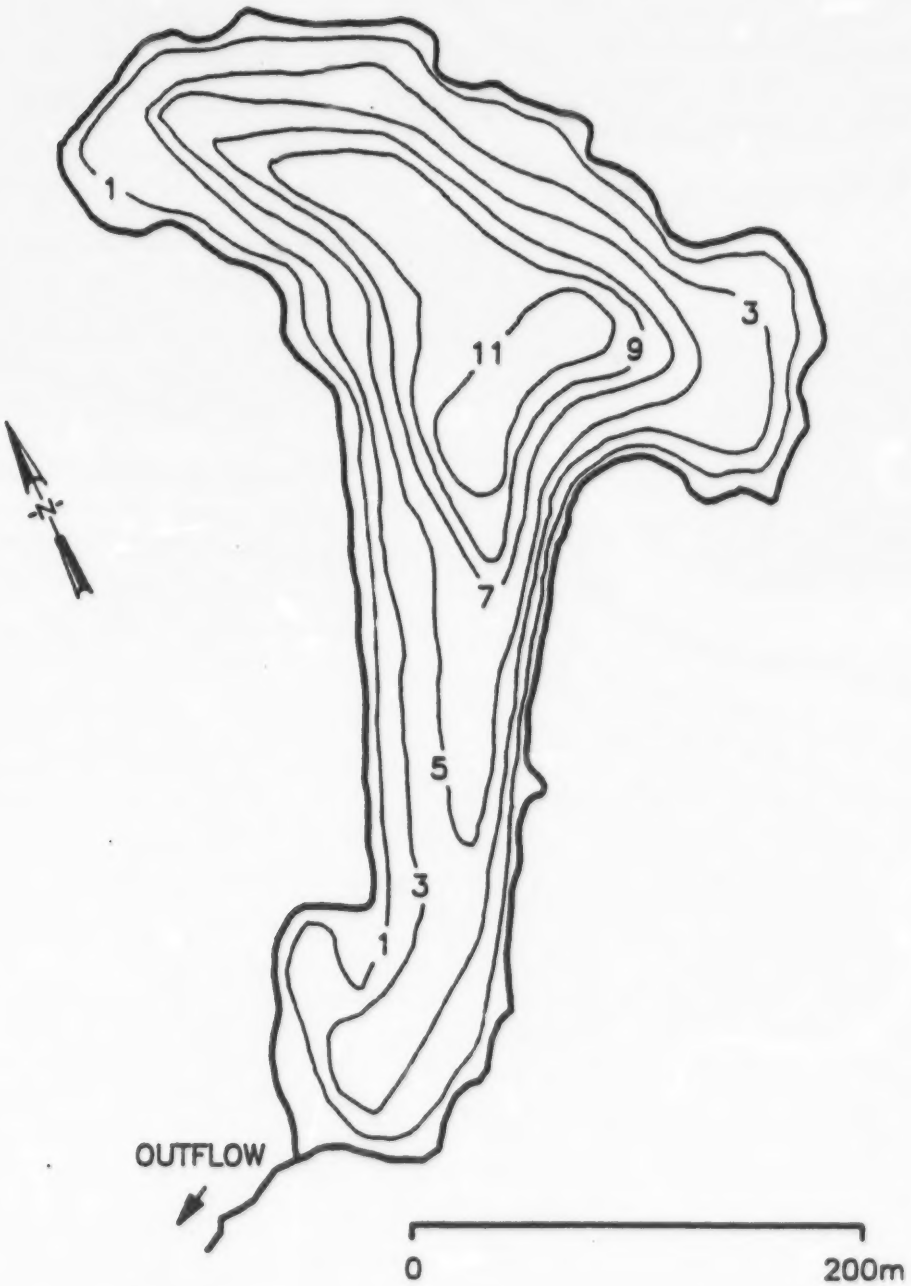


Sherborne (Trout) Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
252.	240.9	9.6	35.1	19.7	3.50	0.82

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	252.	
		45.8
2	207.	
		37.7
4	171.	
		31.0
6	140.	
		25.9
8	119.	
		21.8
10	99.2	
		18.0
12	81.5	
		14.7
14	65.7	
		11.7
16	51.6	
		9.05
18	39.2	
		7.05
20	31.5	
		5.64
22	25.0	
		4.43
24	19.4	
		3.24
26	13.3	
		2.11
28	8.07	
		1.20
30	4.18	
		0.549
32	1.53	
		0.149
34	0.182	
		0.006
35.1	0.000	

Shoelace Lake



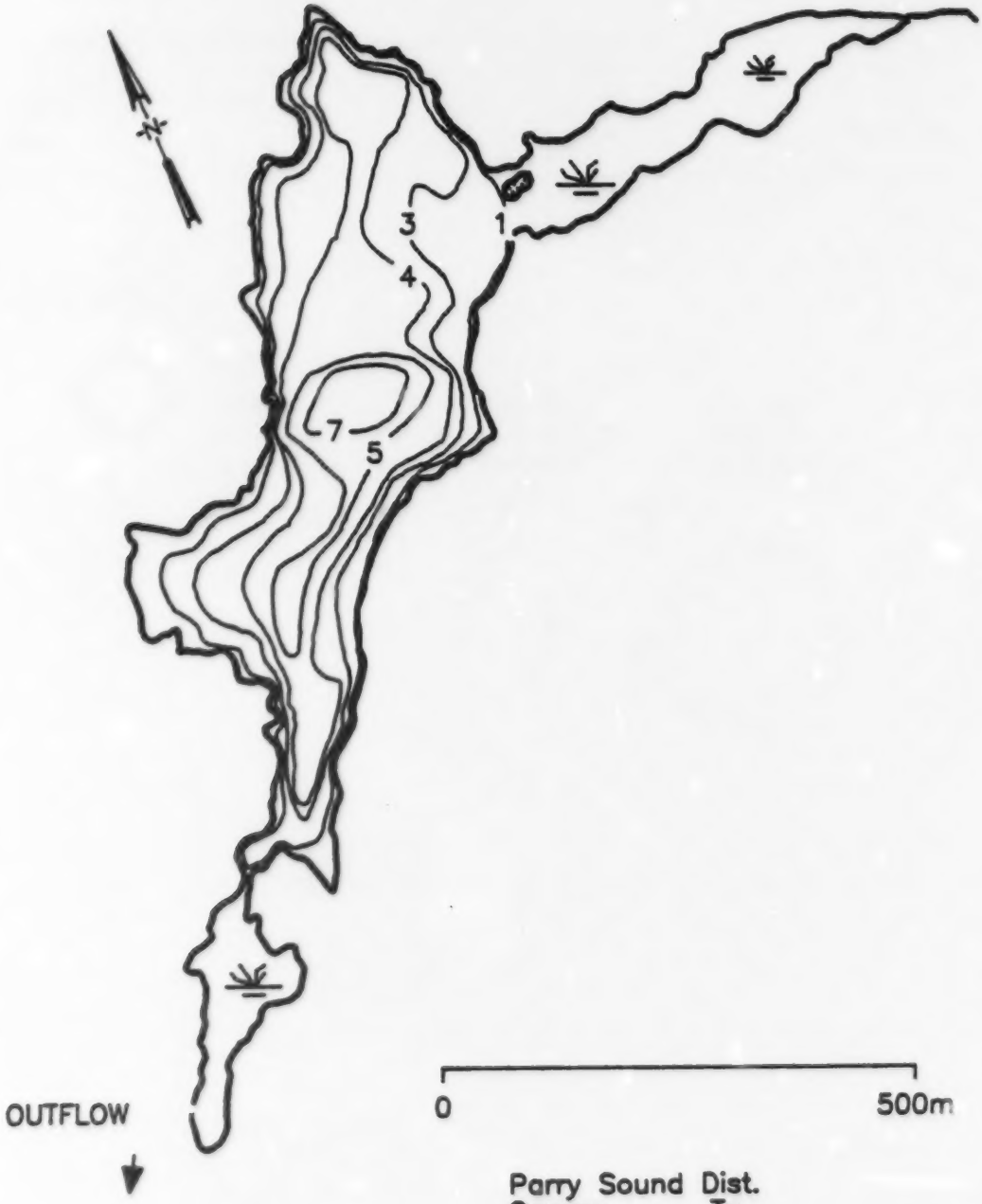
Haliburton. Co.
Sherborne Tp.
Lat.45°13' Long.78°45'

Shoelace Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
7.23	3.23	4.46	12.0	1.67	1.75	1.12

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	7.23	
		1.22
2	5.16	
		0.86
4	3.43	
		0.54
6	2.10	
		0.33
8	1.36	
		0.21
10	0.66	
		0.59
12	0.00	

Skidway Lake



Parry Sound Dist.
Conger Tp.
Lat.45°12' Long.79°52'

Skidway Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
18.48	5.35	2.89	7.8	2.84	1.86	1.11

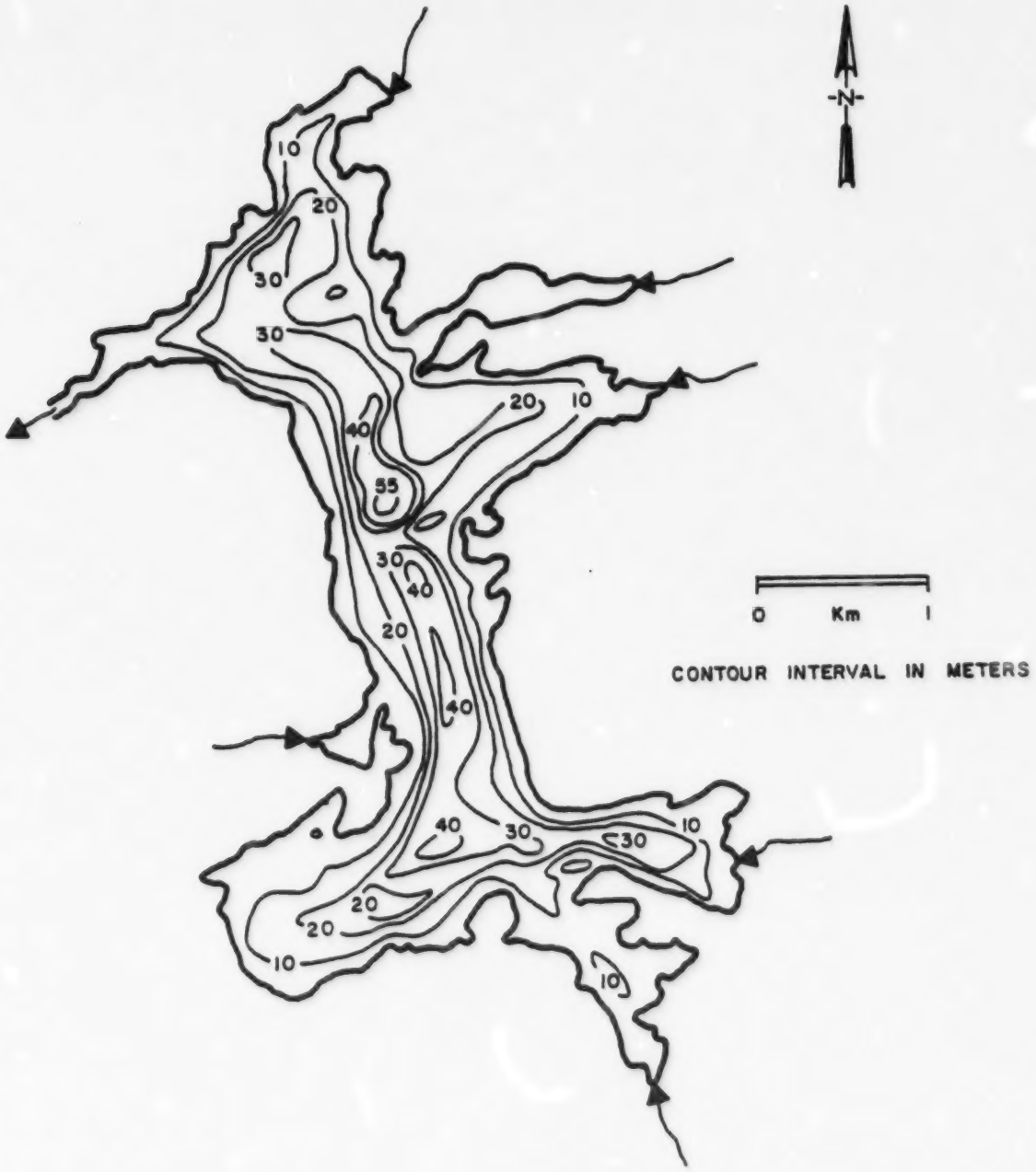
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	18.48	2.86
2	11.75	1.89
4	6.09	0.50
6	1.06	0.10
7.8	0.00	

SMOKE LAKE

NIPISSING Dist.

PECK Tp.

Lat. 45° 31' Long. 78° 41'



Smoke Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
679.	1099.0	16.2	55.0	29.3	3.17	0.88

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	679.	
		128.
2	598.	
		115.
4	551.	
		106.
6	513.	
		98.2
8	470.	
		88.3
10	414.	
		78.3
12	370.	
		70.9
14	340.	
		65.1
16	311.	
		58.7
18	276.	
		51.8
20	243.	
		45.3
22	211.	
		39.1
24	180.	
		33.4
26	154.	
		28.5
28	131.	
		24.0
30	110.	
		19.5

Smoke Lake Morphometry Summary (cont'd)

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
32	85.5	14.9
34	64.4	11.1
36	47.1	8.00
38	33.3	5.48
40	21.9	3.71
42	15.4	2.53
44	10.1	1.61
46	6.19	0.958
48	3.52	0.500
50	1.60	0.267
52	1.09	0.174
55	0.670	

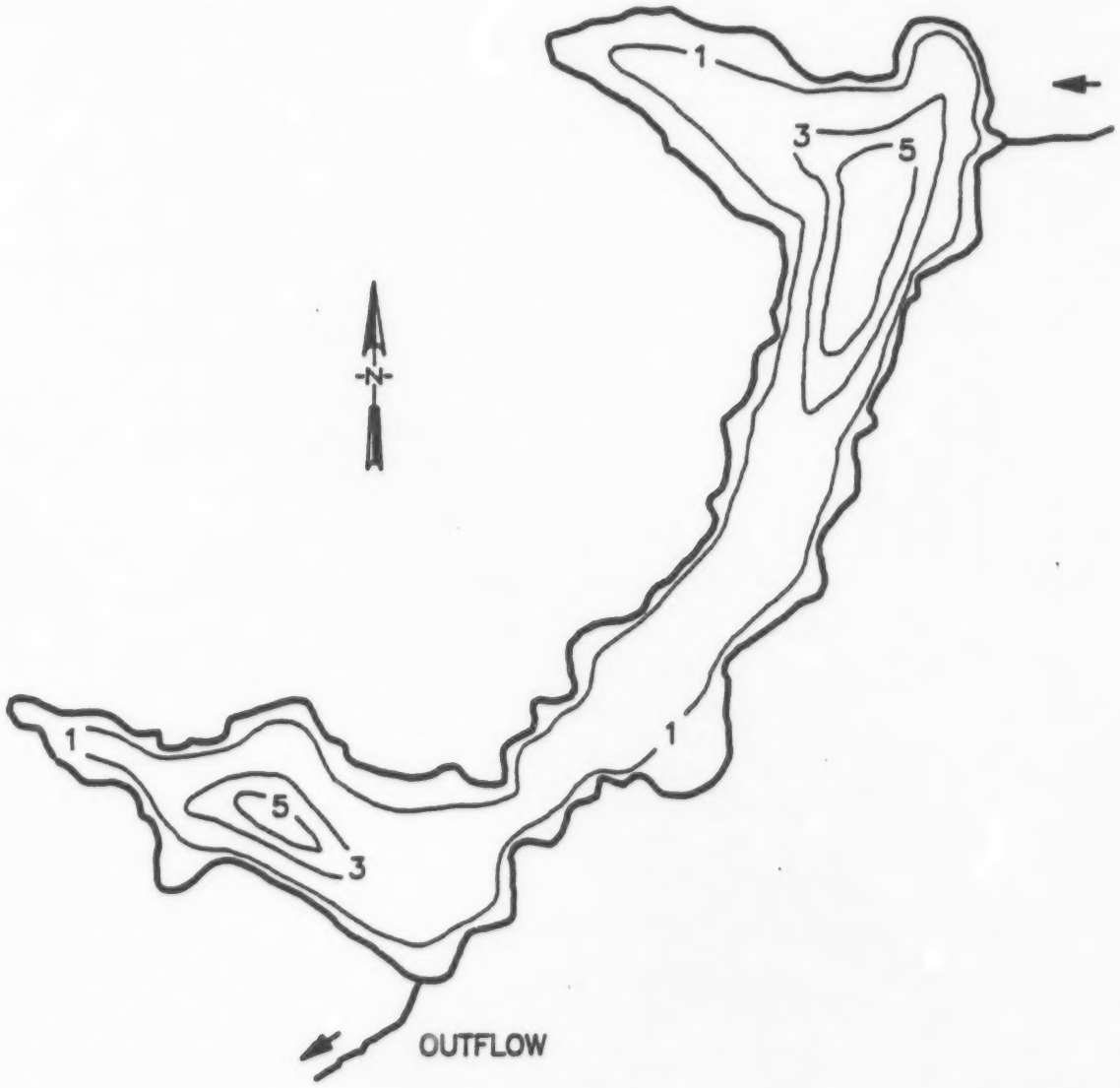
SOLITAIRE LAKE
MUSKOKA Dist.
SINCLAIR Tp.
Lat. 45° 22′ Long. 79° 00′
Outflow
Inflow 1
Inflow 2
Inflow 4
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
N
0m.
100m.
500m.

Solitaire Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
124	164	13.3	31	5.98	1.51	1.29

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	124	
		22.2
2	98.6	
		18.7
4	88.9	
		17.1
6	82.3	
		15.7
8	74.9	
		14.2
10	66.8	
		12.7
12	60.6	
		11.5
14	54.5	
		10.4
16	49.0	
		9.27
18	43.7	
		8.22
20	38.6	
		7.23
22	33.8	
		6.24
24	28.7	
		5.12
26	22.6	
		3.53
28	13.1	
		1.56
30	3.52	
		0.117
31	0.00	

Sunset Lake



0 500m

Nipissing Dist.
McCraney Tp.
Lat.45°34' Long.78°56'

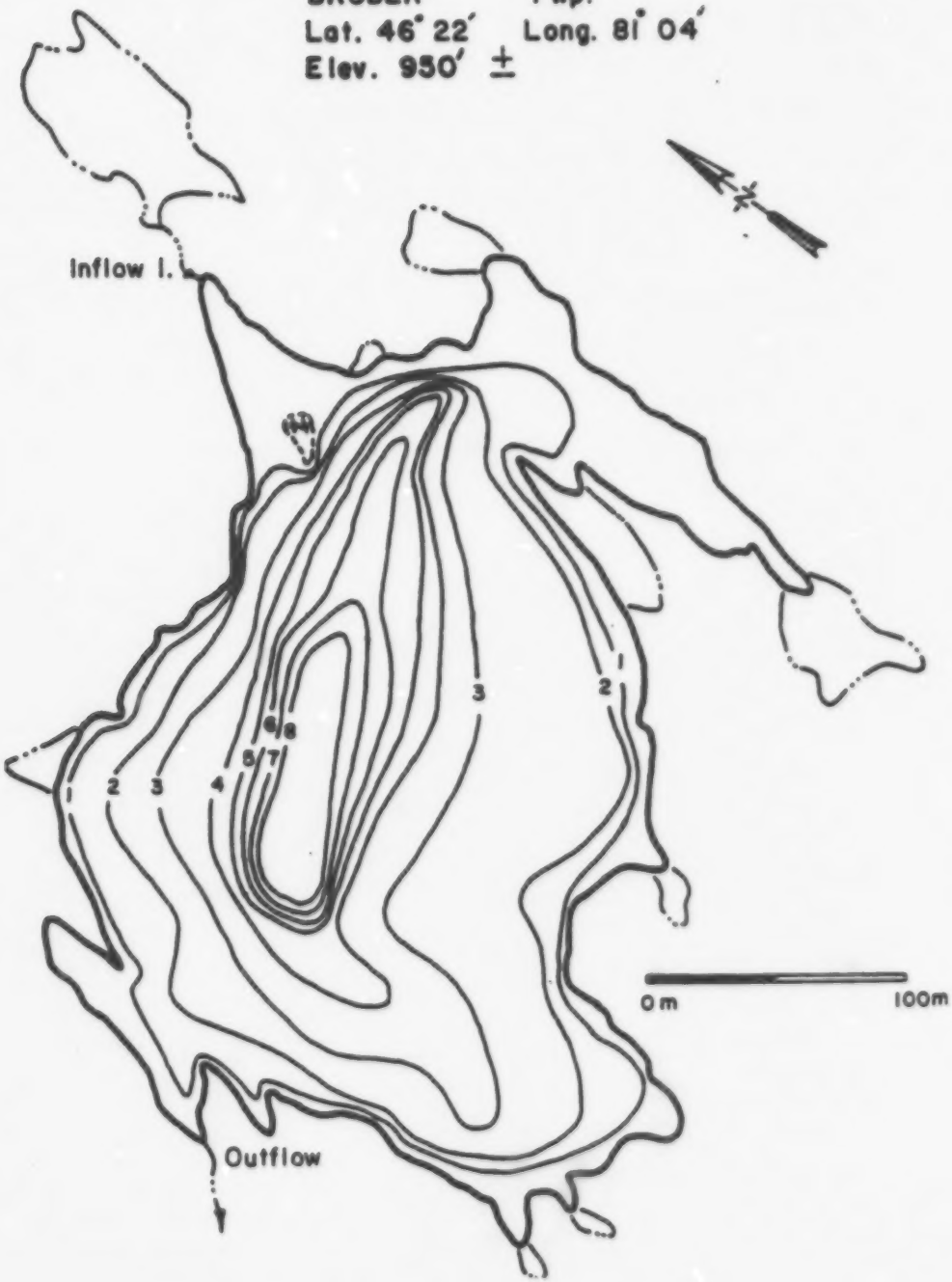
Sunset Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
12.94	2.36	1.82	6.5	3.11	2.44	0.84

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	12.94	
		1.73
2	4.72	
		0.49
4	1.31	
		0.14
6.5	0.00	

SWAN LAKE

SUDBURY Dist.
BRODER Twp.
Lat. 46° 22′ Long. 81° 04′
Elev. 950′ ±



Swan Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
5.78	1.62	2.8	8.8	1.59	1.87	0.96

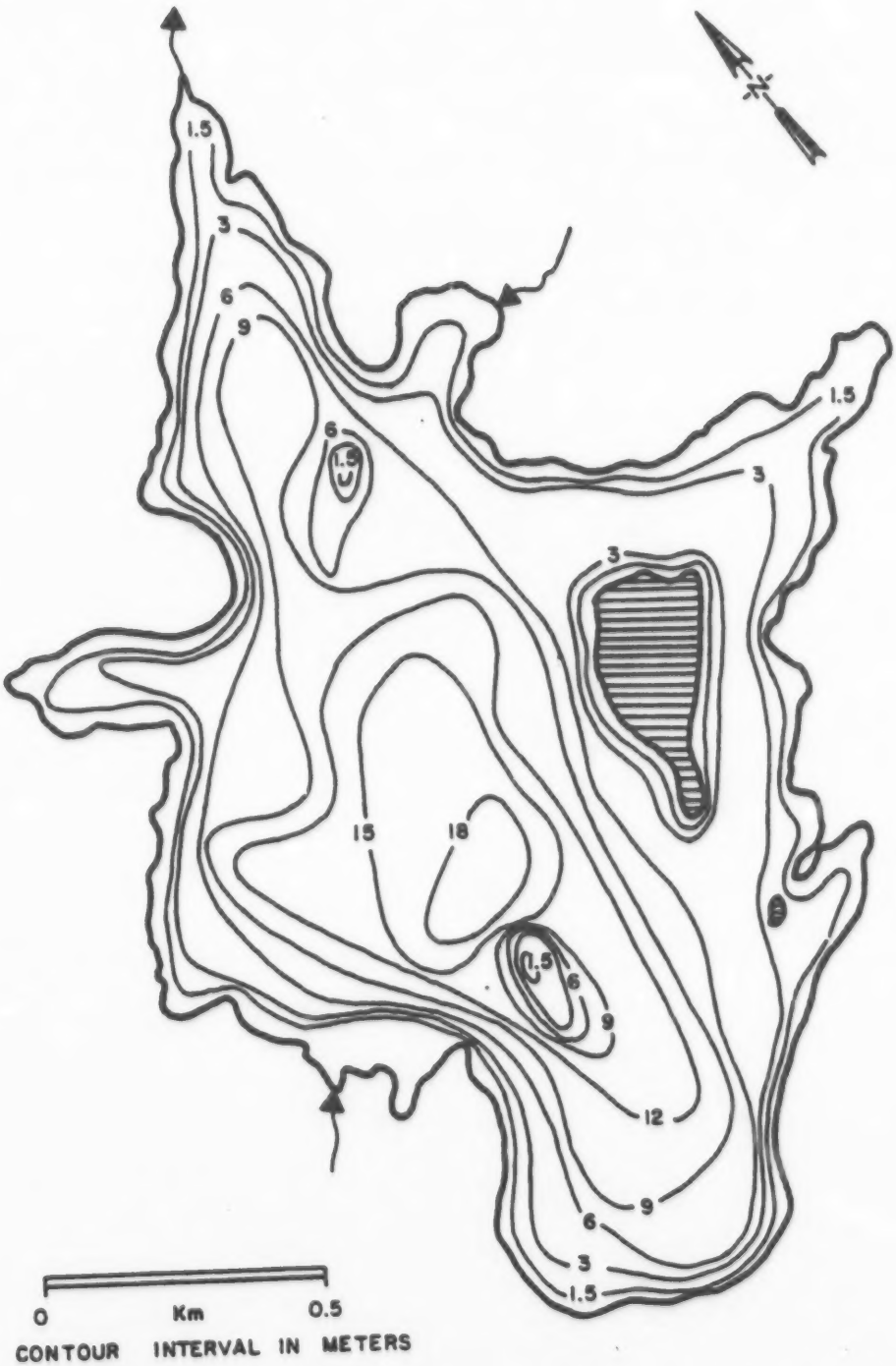
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	5.78	
		0.514
1	4.53	
		0.411
2	3.71	
		0.284
3	2.04	
		0.160
4	1.18	
		0.101
5	0.846	
		0.070
6	0.564	
		0.045
7	0.339	
		0.028
8	0.217	
		0.006
8.8	0.000	

TIMBERWOLF LAKE

NIPISSING Dist.

HUNTER Tp.

Lat. 45° 41' Long. 78° 48'



Timberwolf Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
167.	124.0	7.4	20.4	8.34	1.82	1.09

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	167.	
		30.8
2	141.	
		25.6
4	116.	
		20.4
6	88.8	
		15.7
8	68.7	
		11.9
10	50.7	
		8.55
12	35.3	
		5.77
14	22.9	
		3.23
16	10.3	
		1.50
18	5.09	
		0.549
20	0.950	
		0.013
20.4	0.000	

Vernon Lake
BIG ISLAND
ROCK ISLAND
CLEARVIEW ISLAND
Muskoka District
Stisted & Chaffey Tp.
Lat.45°20' Long.79°17'
This map is intended for fisheries management purposes only. It should not be used as a guide in navigation because no effort has been made to show the various shoals and hazards which might occur between sounding points.

Vernon Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
1454	1912.0	13.15	36.58	35.68	2.64	1.08

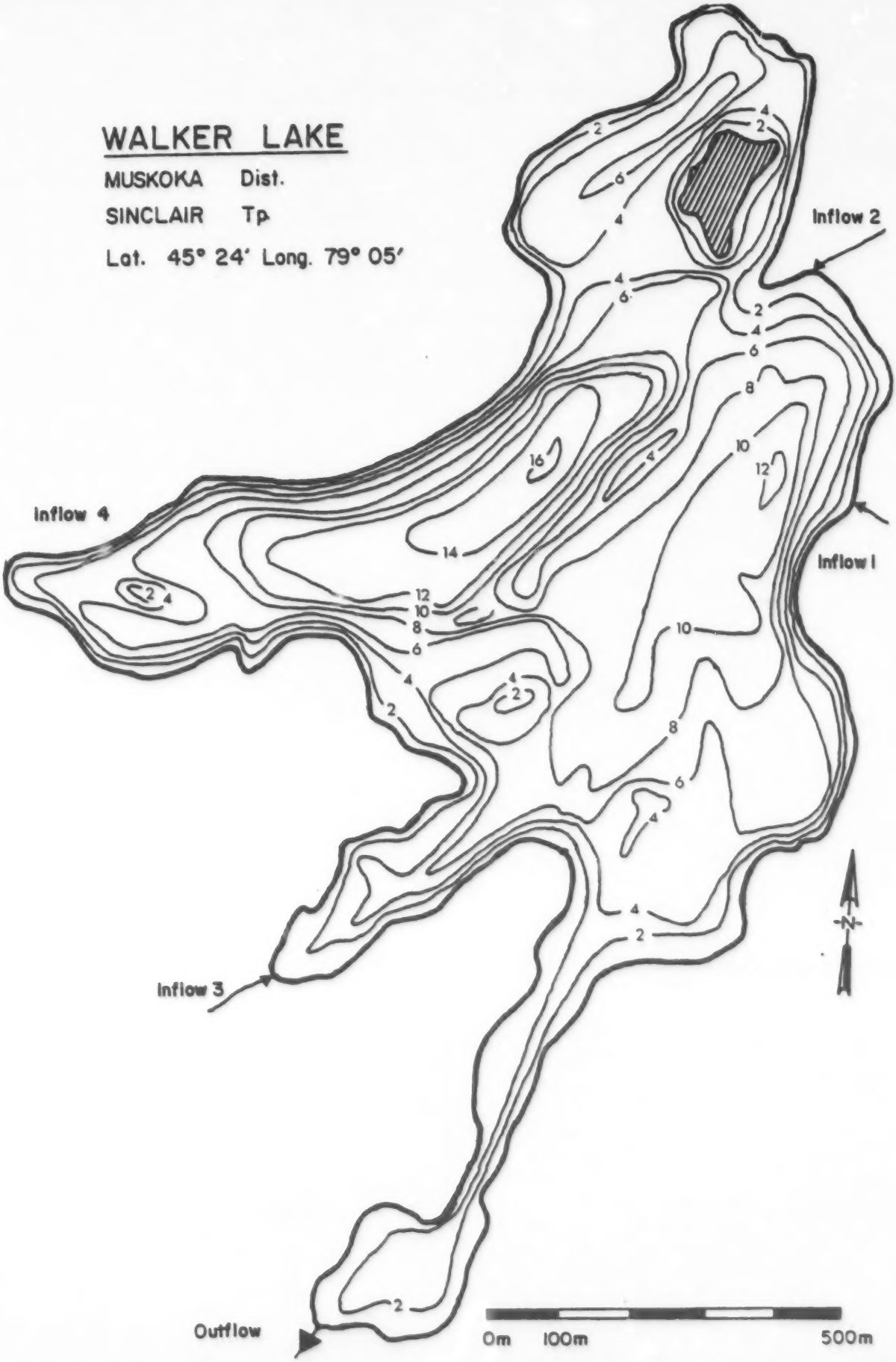
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	1,454	
		274.9
2	1,296	
		244.1
4	1,146	
		215.1
6	1,006	
		188.3
8	879.0	
		163.8
10	760.8	
		141.1
12	651.2	
		122.0
14	571.8	
		107.1
16	499.7	
		93.15
18	432.5	
		81.02
20	379.7	
		71.08
22	331.7	
		61.82
24	287.0	
		51.46
26	224.7	
		38.89
28	165.7	
		28.00
30	115.8	
		18.12
32	65.13	
		8.941
34	27.03	
36.58	0.00	

WALKER LAKE

MUSKOKA Dist.

SINCLAIR Tp.

Lat. 45° 24' Long. 79° 05'

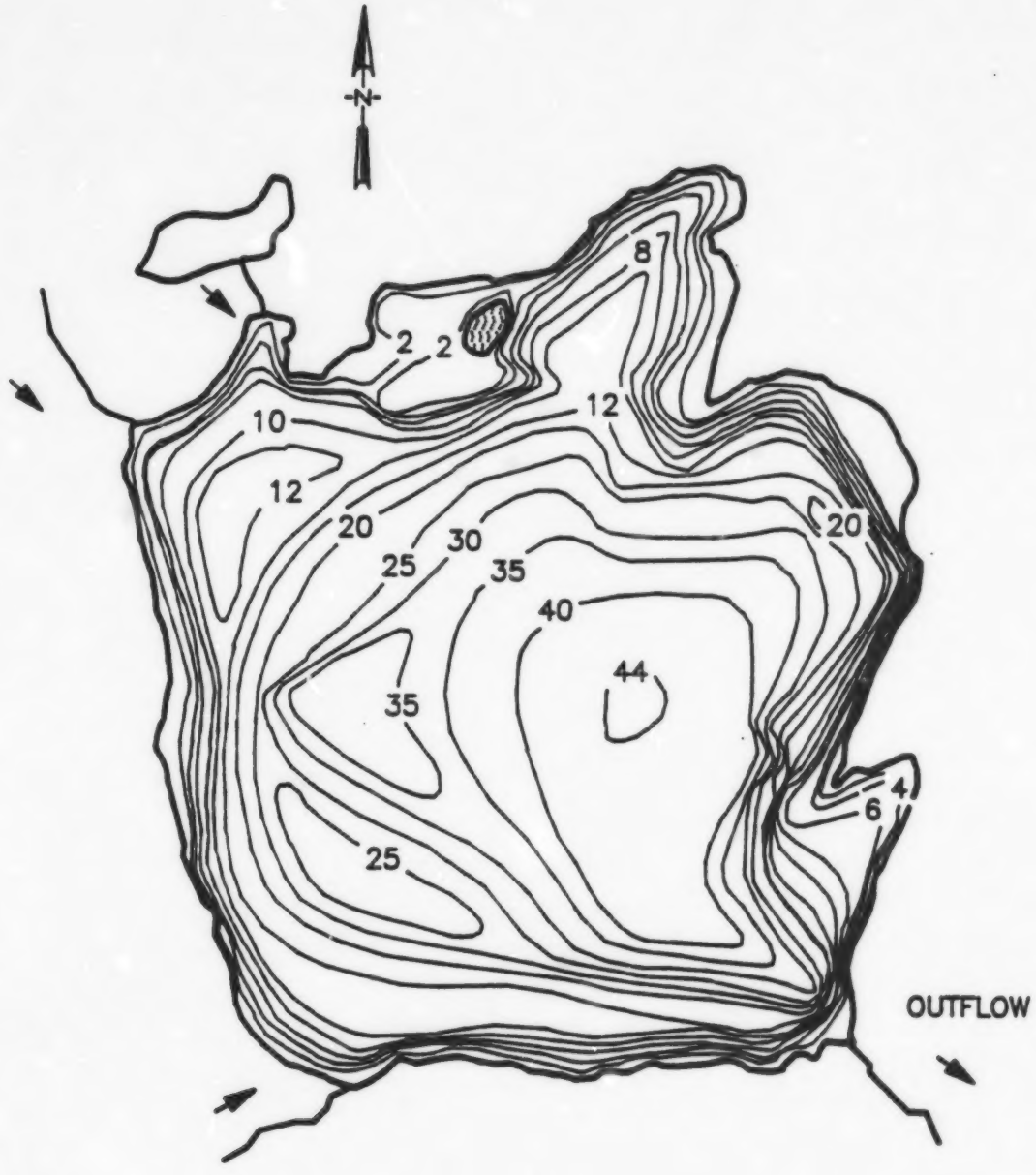


Walker Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
68.2	42.1	6.2	17	6.44	2.20	1.09

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	68.2	
		12.6
2	58.2	
		10.5
4	46.8	
		8.07
6	34.3	
		5.32
8	19.6	
		3.04
10	11.2	
		1.65
12	5.63	
		0.715
14	1.86	
		0.155
16	0.08	
		0.003
17	0.00	

Westward Lake



0 500m

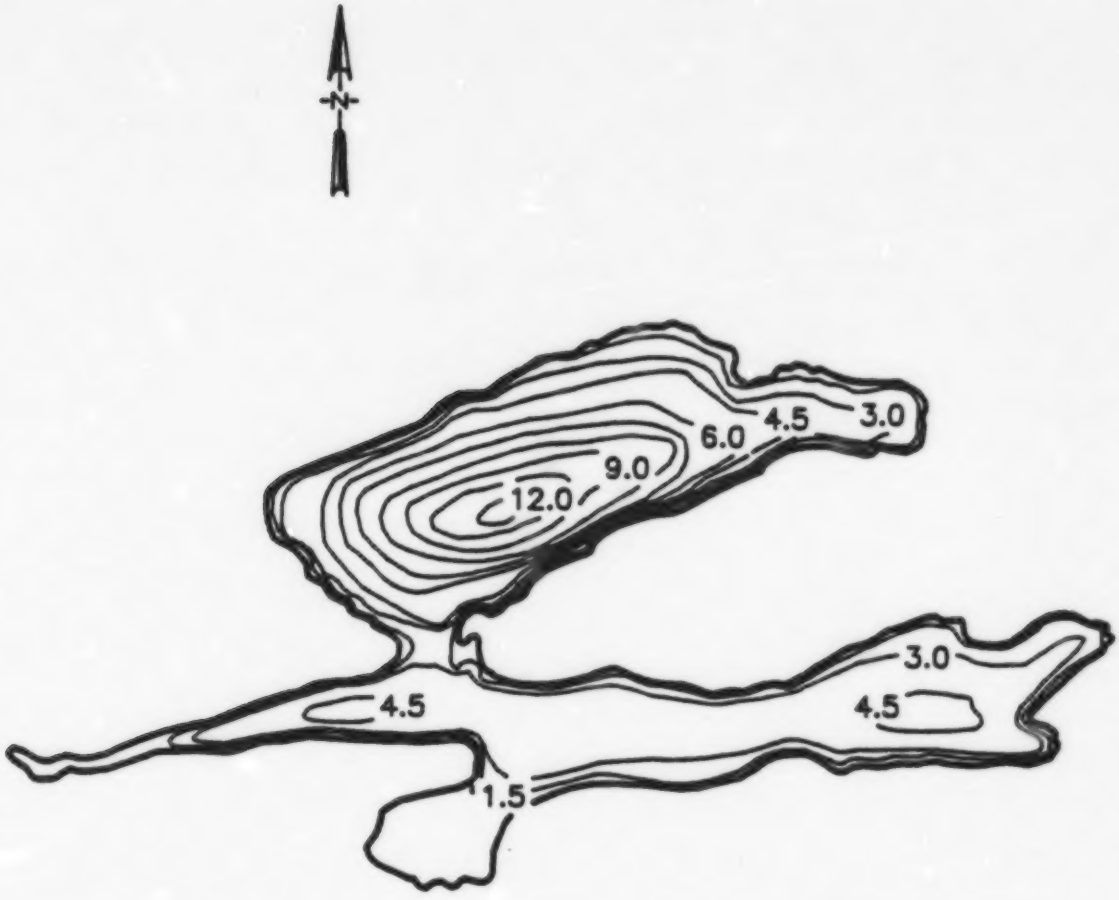
Nipissing Dist.
Peck Tp.
Lat.45°29' Long.78°47'

Westward Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
63.0	129.5	20.54	44.0	3.52	1.25	1.40

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	63.3	
		12.1
2	58.4	
		11.3
4	55.0	
		10.8
6	53.1	
		10.3
8	49.7	
		9.57
10	46.1	
		8.65
12	40.5	
		14.9
16	34.0	
		12.9
20	30.6	
		13.8
25	24.8	
		10.9
30	18.8	
		7.97
35	13.2	
		5.04
40	7.22	
		1.24
44	0.383	

Windfall Lake



0 500m

Nipissing
Butt
Lat. 45°45' Long 79°06'

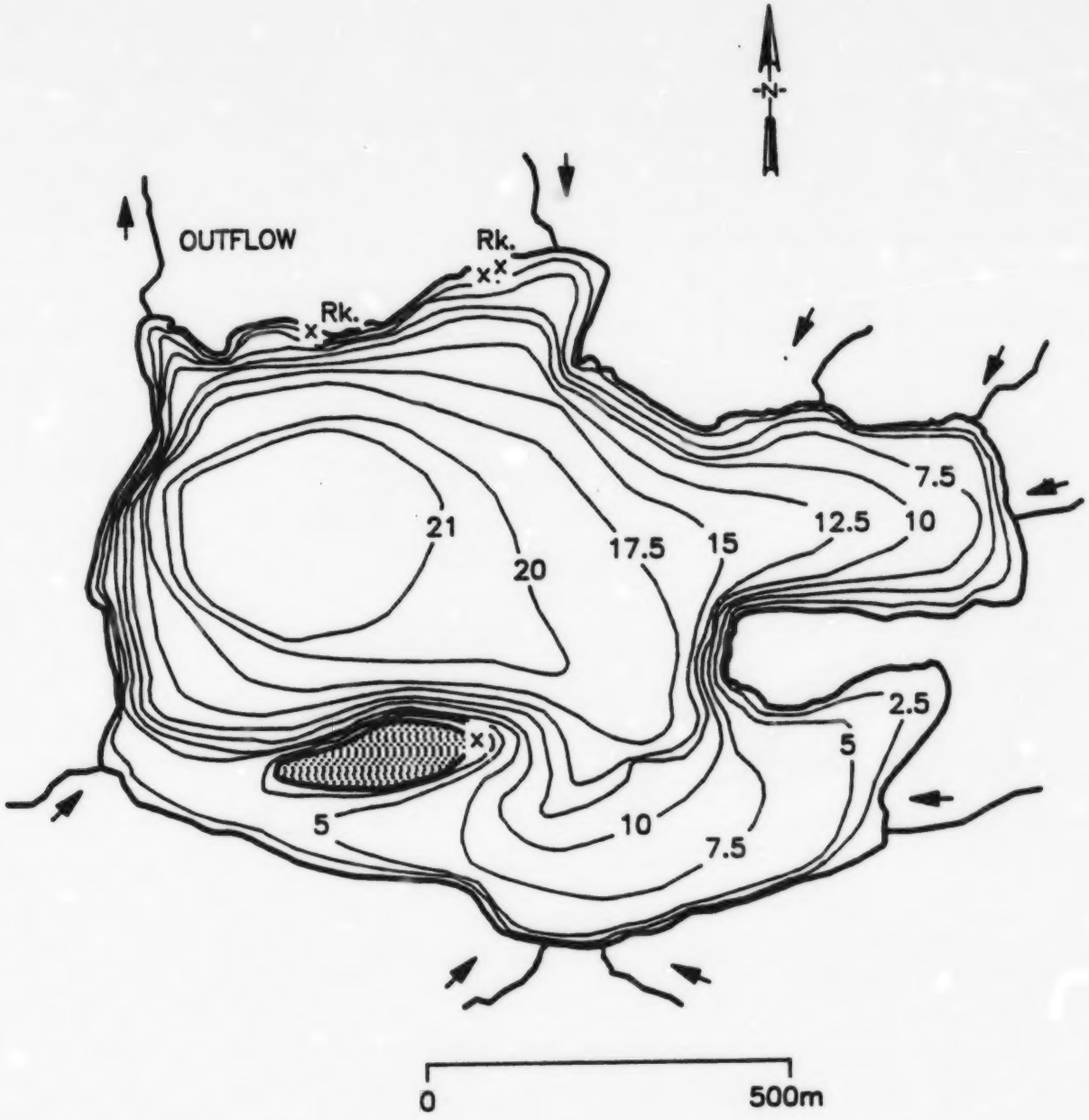
Dist.
Tp.

Windfall Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
25.7	11.16	4.35	13.8	4.62	2.57	0.95

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	25.66	
		4.53
2	19.78	
		3.24
4	11.11	
		1.55
6	5.61	
		0.929
8	3.73	
		0.579
10	2.05	
		0.269
12	0.74	
		0.062
13.8	0.00	

Young Lake



Muskoka Watt
Lat. 45°13'

Dist. Tp.
Lat. 79°33'

Young Lake Morphometry Summary

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)	Shoreline Length L (km)	Development of Shoreline D_L	Development of Volume D_v
105.9	127.4	12.03	21.1	5.97	1.64	1.71

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	105.90	
		20.46
2	98.72	
		18.97
4	90.82	
		17.27
6	80.95	
		15.07
8	70.06	
		13.07
10	60.75	
		11.34
12	52.72	
		9.814
14	45.60	
		8.413
16	38.13	
		6.812
18	29.21	
		4.721
20	18.42	
		1.457
21.1	0.00	

Figure 1: Lake Muskoka – 1986 Sampling Sites

Gravenhurst Bay (IM1) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
179.40	175.00	9.76	15.20

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	179.40	
		33.56
2	157.50	
		29.75
4	141.20	
		26.77
6	125.40	
		23.54
8	112.20	
		21.46
10	101.60	
		19.11
12	89.68	
		15.56
14	59.56	
		5.29
15.2	0.00	

South Bay (IM2) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
507.50	427.70	8.43	18.29

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	507.50	94.35
2	438.30	82.87
4	390.80	73.50
6	343.70	63.65
8	293.50	52.76
10	218.90	34.07
12	126.00	18.04
14	58.60	7.10
16	16.69	1.27
18.29	0.00	

Stephen's Bay (IM3) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
75.18	54.86	7.30	18.29

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	75.18	
		13.55
2	61.03	
		11.42
4	53.21	
		9.87
6	44.72	
		7.83
8	33.86	
		5.76
10	23.27	
		3.62
12	13.39	
		1.92
14	6.23	
		0.76
16	1.77	
		0.14
18.29	0.00	

Birch Island East End (IM4) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
782.00	490.30	6.27	15.85

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	782.20	142.30
2	640.70	112.90
4	491.40	85.22
6	370.00	65.42
8	286.00	48.46
10	184.80	25.76
12	80.04	9.13
14	18.48	1.14
15.85	0.00	

Walker's Point (Browning Island West) (IM5) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
2083.00	3957.00	19.00	52.43

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	2083.00	770.20
4	1765.00	647.90
8	1491.00	549.10
12	1259.00	460.40
16	1047.00	380.60
20	866.40	316.40
24	717.90	259.80
28	583.30	208.70
32	462.70	163.30
36	356.00	113.70
40	210.10	59.88
44	96.59	23.20
48	26.65	3.93
52.43	0.00	

Pine Needle Point - Taylor Island (IM6) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
128.30	63.26	4.93	11.28

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	128.30	
		23.48
2	105.80	
		17.99
4	74.99	
		12.30
6	47.40	
		6.77
8	21.89	
		2.54
10	4.19	
		0.18
11.28	0.00	

Bala Bay (IM7) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
611.40	579.10	9.47	37.19

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	611.40	
		112.60
2	515.30	
		93.69
4	423.00	
		76.25
6	343.50	
		62.40
8	281.50	
		50.79
10	229.90	
		41.79
12	188.70	
		33.96
14	151.50	
		26.93
16	118.50	
		20.72
18	89.46	
		15.97
20	71.68	
		12.84
22	56.97	
		10.06
24	43.94	
		7.63
26	32.61	
		5.53
28	22.96	
		3.77
30	15.00	
		2.34
32	8.73	
		1.26
34	4.14	
		0.51
36	1.25	
		0.07
37.19	0.00	

Dudley Bay (IM3) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
362.20	276.40	7.63	18.29

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	362.20	
		66.58
2	305.10	
		56.55
4	261.00	
		48.02
6	218.70	
		39.42
8	176.30	
		30.87
10	126.50	
		19.69
12	72.84	
		10.43
14	33.87	
		4.11
16	9.64	
		0.74
18.29	0.00	

North Bay (IM9) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
1134.00	1210.00	10.67	28.65

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	1134.00	
		213.70
2	1005.00	
		190.20
4	897.70	
		169.10
6	789.10	
		145.60
8	668.70	
		122.50
10	557.00	
		100.90
12	454.00	
		81.37
14	361.50	
		63.92
16	279.50	
		48.58
18	208.00	
		34.55
20	138.40	
		21.78
22	81.81	
		11.94
24	40.01	
		5.05
26	13.00	
		1.15
28.65	0.00	

East Bay (IM10) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
741.40	1295.00	17.47	41.76

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	741.40	
		142.30
2	681.10	
		129.90
4	618.70	
		117.70
6	559.60	
		106.40
8	504.60	
		95.93
10	459.00	
		88.28
12	424.00	
		81.42
14	390.40	
		74.84
16	358.20	
		68.54
18	327.40	
		62.36
20	296.30	
		56.24
22	266.40	
		50.44
24	238.20	
		44.94
26	211.50	
		39.77
28	186.40	
		34.91
30	162.90	
		30.37
32	141.00	
		26.14
34	120.70	
		22.23
36	101.90	
		16.07
38	50.91	
		5.72
40	11.14	
		0.65
41.76	0.00	

Crown Island Pudding Rk. (IM11) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
2096.00	5174.00	24.68	67.06

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	2096.00	
		778.00
4	1786.00	
		658.90
8	1530.00	
		557.50
12	1376.00	
		525.60
16	1253.00	
		476.90
20	1130.00	
		427.50
24	1008.00	
		380.10
28	893.40	
		335.50
32	785.40	
		293.70
36	684.30	
		243.70
40	528.20	
		181.60
44	383.60	
		128.30
48	262.00	
		84.34
52	163.60	
		49.58
56	88.20	
		24.05
60	35.92	
		7.76
64	6.74	
		0.69
67.06	0.00	

Mirror Lake (IM12) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
52.48	14.08	2.68	5.79

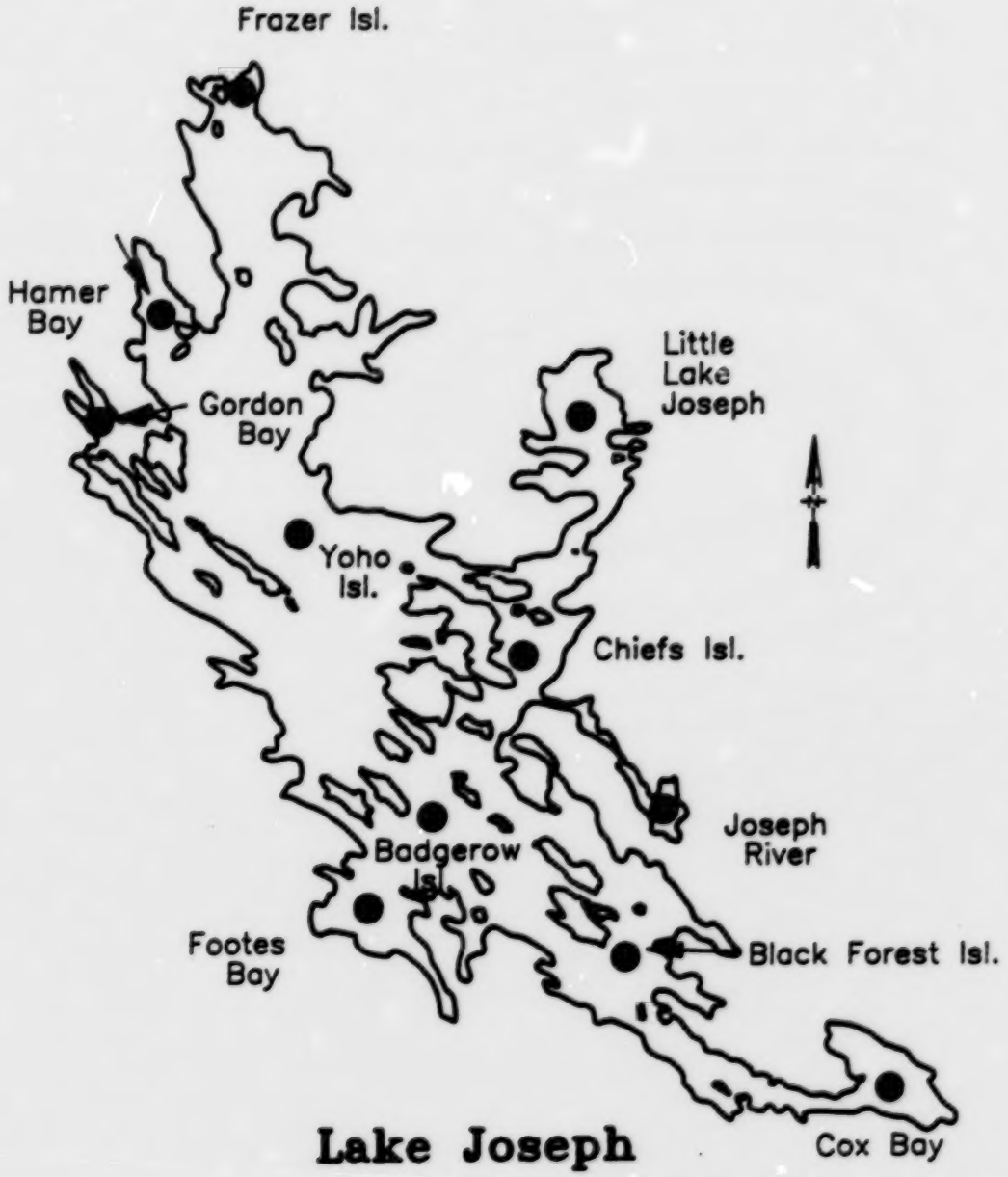
Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	52.48	8.78
2	34.67	4.37
4	11.22	0.93
5.79	0.00	

Muskoka Bay (IM13) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
241.20	170.90	7.09	13.50

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	241.20	
		42.65
2	190.50	
		34.63
4	160.00	
		29.83
6	138.40	
		25.37
8	113.40	
		19.96
10	86.66	
		14.67
12	58.28	
		3.80
13.5	0.00	

Figure 2: Lake Joseph – 1986 Sampling Sites



Frazer Island Port Cockburn (IJ1) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
78.15	78.47	10.04	28.96

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	78.15	
		14.05
2	63.05	
		11.65
4	53.56	
		9.85
6	45.73	
		8.66
8	40.90	
		7.70
10	35.76	
		6.60
12	30.26	
		5.54
14	25.22	
		4.58
16	20.64	
		3.71
18	16.52	
		2.79
20	11.25	
		1.79
22	6.79	
		1.00
24	3.45	
		0.45
26	1.23	
		0.12
28.96	0.00	

Hamer Bay (IJ2) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
119.00	205.58	17.29	46.94

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	119.00	22.69
2	107.90	20.44
4	96.60	18.27
6	86.93	16.75
8	80.58	15.54
10	75.28	14.65
12	71.22	13.85
14	67.27	13.07
16	63.43	12.31
18	59.71	11.25
20	52.32	9.71
22	44.84	8.27
24	37.94	6.95
26	31.61	5.74
28	25.86	4.65
30	20.69	3.67
32	16.09	2.81
34	12.07	2.06
36	8.63	1.43
38	5.76	0.91
40	3.47	0.51
42	1.76	0.23
44	0.62	0.06
46.94	0.00	

Gordon Bay (IJ3) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
102.50	122.70	11.98	35.05

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	102.50	
		19.47
2	91.80	
		16.84
4	76.79	
		14.01
6	64.89	
		12.36
8	58.81	
		11.16
10	52.55	
		9.85
12	46.04	
		8.59
14	39.97	
		7.42
16	34.32	
		6.34
18	29.11	
		5.21
20	22.89	
		4.00
22	17.21	
		2.94
24	12.34	
		2.05
26	8.28	
		1.32
28	5.02	
		0.75
30	2.58	
		0.34
32	0.94	
		0.09
34	0.11	
		0.00
35.05	0.00	

Yoho Island (IJ4) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
1791.00	6399.00	35.74	82.91

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	1791.00	
		349.90
2	1710.00	
		335.20
4	1642.00	
		322.00
6	1583.00	
		312.90
8	1545.00	
		305.10
10	1503.00	
		295.80
12	1455.00	
		286.30
14	1408.00	
		276.90
16	1361.00	
		267.70
18	1315.00	
		259.10
20	1277.00	
		251.60
22	1239.00	
		244.20
24	1203.00	
		236.90
26	1166.00	
		229.70
28	1131.00	
		222.60
30	1096.00	
		215.60
32	1061.00	
		208.80
34	1027.00	
		202.10

Yoho Island (IJ4) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
36	993.60	
		192.80
38	924.50	
		176.80
40	844.00	
		161.00
42	767.10	
		146.00
44	693.90	
		131.80
46	624.40	
		118.20
48	558.60	
		105.40
50	496.40	
		93.37
52	437.90	
		82.04
54	383.10	
		71.43
56	331.90	
		61.57
58	284.40	
		52.43
60	240.50	
		44.03
62	200.40	
		36.36
64	163.90	
		29.43
66	131.00	
		23.23
68	101.90	
		17.76
70	76.36	
		13.03
72	54.53	
		9.03
74	36.36	
		5.76
76	21.86	
		3.23
78	11.03	
		1.43
80	3.87	
		0.38
82.91	0.00	

Little Lake Joseph (IJ5) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
304.10	470.80	15.48	38.71

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	304.10	57.17
2	267.40	49.47
4	227.80	41.92
6	193.90	36.35
8	169.90	31.86
10	151.10	28.91
12	138.10	26.38
14	125.70	23.96
16	113.90	21.66
18	102.70	19.88
20	96.86	18.88
22	91.97	17.92
24	87.21	16.98
26	82.57	16.06
28	78.06	15.17
30	73.68	14.31
32	69.42	13.47
34	65.29	12.66
36	61.29	7.78
38.71	0.00	

Chief's Island (IJ6) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
245.10	209.40	8.54	18.90

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	245.10	
		44.68
2	203.10	
		37.48
4	172.20	
		31.60
6	145.30	
		26.95
8	124.50	
		22.78
10	101.20	
		17.61
12	75.54	
		12.85
14	53.63	
		8.85
16	35.45	
		6.56
18.9	0.00	

Table . Joseph River (IJ7) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
77.17	25.08	3.25	7.62

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	77.17	12.49
2	49.10	7.78
4	29.52	4.24
6	10.48	0.57
7.62	0.00	

Badgerow Island (IJ8) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
526.40	878.70	16.69	37.49

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	526.40	
2	481.90	100.70
4	446.10	92.77
6	413.60	85.80
8	388.00	80.15
10	360.30	74.99
12	329.90	69.00
14	300.80	63.05
16	273.10	57.37
18	246.70	51.96
20	210.30	45.82
22	175.00	38.47
24	143.00	31.74
26	114.20	25.66
28	88.63	20.23
30	66.30	15.44
32	47.21	11.30
34	31.36	7.80
36	18.73	4.96
37.49	0.00	1.47

Footes Bay (IJ9) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
250.80	394.70	15.74	36.58

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	250.80	47.72
2	226.70	43.09
4	204.40	38.80
6	185.80	36.10
8	175.50	34.04
10	164.90	31.94
12	154.50	29.90
14	144.50	27.92
16	134.80	26.01
18	125.40	22.90
20	101.90	18.02
22	78.80	13.70
24	58.66	9.97
26	41.49	6.83
28	27.28	4.28
30	16.04	2.33
32	7.77	0.97
34	2.46	0.21
36.58	0.00	

Black Forest Island (IJ10) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
438.00	474.50	10.83	26.21

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	438.00	
		83.31
2	394.80	
		74.09
4	346.60	
		64.83
6	304.40	
		57.74
8	273.20	
		51.28
10	234.80	
		42.27
12	188.70	
		33.55
14	147.70	
		25.84
16	111.60	
		19.14
18	80.61	
		12.74
20	47.05	
		6.71
22	21.63	
		2.60
24	5.97	
		0.44
26.21	0.00	

Cox Bay (IJ11) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
190.10	129.90	6.83	14.02

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	190.10	34.20
2	153.90	29.04
4	136.60	25.57
6	116.20	20.25
8	86.98	14.24
10	49.04	5.74
12	12.39	0.84
14.02	0.00	

Figure 3: Lake Rosseau – 1986 Sampling Sites

Lake Rosseau

Lat. 45°10' Long. 79°35'

Cameron Bay (IR1) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
95.72	65.98	6.89	13.41

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	95.72	
		18.28
2	86.50	
		15.75
4	71.25	
		12.83
6	56.73	
		9.84
8	41.99	
		6.78
10	22.08	
		2.33
12	3.78	
		0.18
13.41	0.00	

Morgan Bay (IR2) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
265.20	300.10	11.32	29.57

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	265.20	50.52
2	239.40	44.49
4	205.90	38.06
6	175.40	32.36
8	148.60	27.36
10	127.30	23.93
12	112.10	20.97
14	97.80	18.21
16	84.48	15.65
18	72.14	12.38
20	50.68	8.16
22	31.70	4.81
24	17.16	2.35
26	7.04	0.77
28	1.36	0.07
29.57	0.00	

Wiley's Bay (IR3) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
37.57	35.93	9.56	18.32

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	37.57	7.09
2	33.46	6.34
4	30.23	5.73
6	27.03	5.07
8	23.67	4.35
10	19.01	3.20
12	13.15	2.13
14	8.36	1.28
16	4.65	0.71
18.32	0.00	

Skeleton Bay (IR4) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
177.80	170.50	9.59	20.12

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	177.80	33.06
2	153.10	28.33
4	130.40	23.99
6	110.70	20.61
8	95.61	17.68
10	81.04	14.77
12	66.92	12.08
14	54.15	9.67
16	42.73	7.52
18	32.66	2.83
20.12	0.00	

Rest Harbour (IR5) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
140.90	155.10	11.01	22.25

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	140.90	
		26.48
2	123.90	
		23.02
4	106.50	
		19.70
6	91.80	
		17.37
8	81.99	
		15.48
10	73.04	
		13.80
12	64.99	
		12.23
14	57.41	
		10.76
16	50.29	
		9.39
18	43.65	
		5.85
20	13.78	
		1.03
22.25	0.00	

Tobin Island (Ravenscrag Point) (IR6) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
1281.00	2064.00	16.11	35.05

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	1281.00	245.00
2	1172.00	226.60
4	1094.00	211.30
6	1019.00	196.00
8	948.00	183.10
10	884.00	170.90
12	825.70	159.50
14	769.40	148.40
16	715.00	137.70
18	662.60	120.10
20	528.30	92.24
22	397.20	67.89
24	284.80	47.27
26	191.10	30.39
28	116.00	17.24
30	59.51	7.81
32	21.72	2.12
34	2.58	0.09
35.05	0.00	

Portage Bay (IR7) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
149.70	98.00	6.54	12.80

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	149.70	26.86
2	120.30	22.43
4	103.30	19.02
6	86.36	15.40
8	68.04	11.16
10	34.34	3.21
12.8	0.00	

Brackenrig Bay (IR8) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
43.75	8.19	1.87	4.27

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	43.75	6.57
2	21.37	1.62
4.27	0.00	

Arthurlie Bay (IR9) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
111.20	53.53	4.81	7.32

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	111.20	
		20.97
2	98.04	
		17.69
4	79.20	
		13.36
6	34.40	
		1.51
7.32	0.00	

Minette (Ouno Island) (IR10) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
126.40	81.72	6.47	15.54

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	126.40	22.74
2	101.70	18.38
4	82.37	14.71
6	65.17	11.51
8	50.23	8.48
10	31.94	4.36
12	13.05	1.42
14	2.48	0.13
15.54	0.00	

Venetia Group (IR11) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
1225.00	2792.00	22.79	46.63

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	1225.00	
		463.80
4	1095.00	
		413.20
8	972.30	
		368.90
12	879.60	
		335.90
16	800.30	
		303.20
20	704.80	
		258.80
24	590.90	
		215.20
28	487.00	
		175.70
32	393.30	
		140.10
36	309.30	
		88.74
40	129.70	
		26.88
44	20.45	
		1.80
46.63	0.00	

Nutchinbaker Bay (IR12) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
1809.00	6731.00	37.22	90.22

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	1809.00	
		354.00
2	1732.00	
		339.20
4	1660.00	
		325.00
6	1592.00	
		312.50
8	1533.00	
		301.10
10	1483.00	
		292.70
12	1445.00	
		285.20
14	1407.00	
		277.70
16	1370.00	
		270.30
18	1333.00	
		263.00
20	1297.00	
		255.60
22	1260.00	
		248.40
24	1224.00	
		241.20
26	1188.00	
		234.20
28	1153.00	
		227.20
30	1119.00	
		220.40
32	1085.00	
		213.60
34	1051.00	
		207.00

Nutchinbaker Bay (IR12) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
36	1019.00	
		198.30
38	956.30	
		184.00
40	884.40	
		169.90
42	815.40	
		156.40
44	749.20	
		143.40
46	685.70	
		131.00
48	625.10	
		119.20
50	567.30	
		107.90
52	512.30	
		97.19
54	460.10	
		87.02
56	410.70	
		77.42
58	364.10	
		68.39
60	320.30	
		59.91
62	279.30	
		51.99
64	241.10	
		44.63
66	205.70	
		37.84
68	173.10	
		31.61
70	143.40	
		25.93
72	116.40	
		20.82
74	92.27	
		16.27
76	70.92	
		12.28
78	52.37	
		8.85
80	36.63	
		5.99
82	23.70	
		3.68
84	13.57	
		1.94

Nutchinbaker Bay (IR12) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
86	6.25	0.75
88	1.73	0.13
90.22	0.00	

Figure 4: Lake of Bays – 1986 Sampling Sites

Pancake Bay - Dorset (IB1) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
69.89	31.75	4.54	13.41

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	69.89	12.40
2	54.18	9.15
4	37.78	6.12
6	22.68	2.98
8	8.32	0.87
10	2.09	0.22
12	0.36	0.02
13.41	0.00	

Trading Bay - Dorset (IB2) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
425.70	797.20	18.73	47.24

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	425.70	80.33
2	379.70	73.33
4	353.80	68.19
6	326.80	62.19
8	295.30	56.32
10	271.60	52.83
12	256.80	49.92
14	242.40	47.08
16	228.40	44.33
18	214.90	41.04
20	194.70	36.88
22	174.30	32.92
24	155.10	29.19
26	137.00	25.68
28	120.00	22.40
30	104.20	19.34
32	89.43	16.51
34	75.82	13.90

Trading Bay - Dorset (IB2) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
36	63.34	11.00
38	45.01	7.20
40	27.64	4.14
42	14.49	1.93
44	5.54	0.57
46	0.82	0.03
47.24	0.00	

Rabbit Bay - Dorset (IB3) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
72.52	77.06	10.63	22.86

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	72.52	13.40
2	61.88	11.66
4	54.77	10.27
6	47.76	8.80
8	40.31	7.42
10	34.62	6.54
12	30.78	5.80
14	27.17	5.10
16	23.78	4.44
18	20.61	2.91
20	7.90	0.75
22.86	0.00	

Ten Mile Bay (IB4) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
779.30	1039.00	13.34	41.15

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	779.30	146.10
2	685.50	131.00
4	625.20	119.20
6	565.70	106.90
8	503.80	94.81
10	444.30	83.06
12	387.00	72.00
14	333.70	61.73
16	284.30	52.25
18	238.90	43.50
20	196.70	35.47
22	158.60	28.25
24	124.60	21.85
26	94.65	16.28
28	68.83	11.53
30	47.11	7.59
32	29.50	4.48
34	15.99	2.19

Ten Mile Bay (IB4) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
36	6.59	0.80
38	2.20	0.22
40	0.29	0.011
41.15	0.00	

Bigwin Island (IB5) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
652.60	1155.00	17.70	56.39

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	652.60	122.50
2	575.60	110.40
4	529.20	101.40
6	484.20	92.31
8	439.30	83.79
10	401.80	77.39
12	372.40	71.63
14	344.10	66.08
16	316.90	60.76
18	290.90	55.29
20	261.60	49.45
22	233.20	43.93
24	206.40	38.74
26	181.30	33.87
28	157.70	29.33
30	135.90	25.12
32	115.60	21.23
34	97.00	17.67

Bigwin Island (IB5) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
36	80.01	14.46
38	64.97	11.63
40	51.61	9.11
42	39.78	6.90
44	29.49	5.00
46	20.74	3.40
48	13.52	2.11
50	7.84	1.13
52	3.70	0.45
54	1.10	0.09
56.39	0.00	

Haystack Bay (IB6) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
245.00	306.80	12.52	40.84

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	245.00	45.94
2	214.30	39.57
4	181.80	33.34
6	152.00	27.67
8	125.10	22.79
10	106.60	20.39
12	97.15	18.52
14	88.10	16.75
16	79.50	15.08
18	71.34	13.35
20	62.00	11.49
22	53.06	9.78
24	44.82	8.20
26	37.28	6.76
28	30.43	5.46
30	24.28	4.30
32	18.81	3.28
34	14.05	2.39
36	9.98	1.44
38	3.97	0.38
40.84	0.00	

Dwight Bay (IB7) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
649.60	1447.00	22.27	53.34

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	649.60	
		121.60
2	569.10	
		108.80
4	519.10	
		99.19
6	478.30	
		93.66
8	458.40	
		89.77
10	439.80	
		86.24
12	422.60	
		82.84
14	405.80	
		79.51
16	389.30	
		76.24
18	373.20	
		72.45
20	350.50	
		67.77
22	327.40	
		63.23
24	305.10	
		58.85
26	283.60	
		54.62
28	262.80	
		50.56
30	242.90	
		46.65
32	223.70	
		42.89

Dwight Bay (IB7) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
34	205.30	39.30
36	187.80	34.56
38	153.10	26.80
40.84	115.80	19.86
42	83.66	13.95
44	56.75	9.09
46	35.05	5.27
48	18.55	2.49
50	7.26	0.76
52	1.17	0.052
53.34	0.00	

Portage Bay (IB8) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
173.60	252.20	14.53	47.24

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	173.60	
		32.17
2	148.60	
		27.54
4	127.10	
		23.42
6	107.90	
		19.95
8	91.84	
		17.02
10	80.52	
		15.48
12	74.31	
		14.26
14	68.35	
		13.10
16	62.65	
		11.98
18	57.19	
		10.95
20	52.37	
		10.02
22	47.83	
		9.13
24	43.50	
		8.28
26	39.38	
		7.48
28	35.45	
		6.72
30	31.74	
		5.99
32	28.23	
		5.31
34	24.92	
		4.67

Portage Bay (IB8) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
36	21.83	3.84
38	15.75	2.52
40	9.67	1.45
42	5.07	0.68
44	1.94	0.20
46	0.29	0.01
47.24	0.00	

Seagull Rock Area (IB9) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
902.70	2543.00	28.17	57.91

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	902.70	
		176.00
2	858.90	
		168.70
4	828.20	
		162.60
6	797.00	
		156.10
8	763.80	
		149.50
10	730.40	
		142.70
12	696.70	
		136.00
14	663.90	
		129.60
16	631.80	
		123.20
18	600.50	
		117.50
20	575.50	
		112.70
22	552.00	
		108.10
24	529.00	
		103.50
26	506.40	
		99.07
28	484.40	
		94.71
30	462.80	
		90.45
32	441.70	
		86.28

Seagull Rock Area (IB9) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
34	421.20	82.21
36	401.10	75.56
38	344.40	62.18
40	278.70	49.74
42	219.90	38.68
44	168.10	29.02
46	123.20	20.74
48	85.33	13.85
50	54.37	8.36
52	30.36	4.25
54	13.29	1.53
56	3.18	0.20
57.91	0.00	

Roothog Island (IB10) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
1675.00	4428.00	26.43	79.25

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	1675.00	
		319.40
2	1526.00	
		297.20
4	1447.00	
		281.40
6	1370.00	
		266.40
8	1295.00	
		251.90
10	1227.00	
		239.20
12	1166.00	
		227.20
14	1107.00	
		215.60
16	1049.00	
		204.20
18	993.00	
		192.90
20	935.50	
		181.40
22	879.10	
		170.30
24	824.50	
		159.60
26	771.70	
		149.20
28	720.60	
		139.20
30	671.30	
		129.50
32	623.70	
		120.10

Roothog Island (IB10) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
34	577.90	111.10
36	533.80	102.20
38	487.20	92.79
40	441.10	83.80
42	397.30	75.27
44	355.80	67.19
46	316.50	59.58
48	279.60	52.42
50	245.00	45.72
52	212.60	39.48
54	182.50	33.69
56	154.80	28.37
58	129.30	23.50
60	106.10	19.09
62	85.19	15.14
64	66.58	11.65
66	50.26	8.61
68	36.26	6.03
70	24.49	3.92
72	15.04	2.26
74	7.89	1.05
76	3.02	0.31
78	0.45	0.02
79.25	0.00	

Whitehouse Bay (IB11) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
402.70	764.50	18.99	47.24

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	402.70	
		75.20
2	353.00	
		69.39
4	340.90	
		67.00
6	329.10	
		64.65
8	317.40	
		62.01
10	298.40	
		56.82
12	270.10	
		51.31
14	243.30	
		46.08
16	217.80	
		41.13
18	193.80	
		36.68
20	173.60	
		32.84
22	155.00	
		29.21
24	137.40	
		25.80
26	120.80	
		22.60
28	105.30	
		19.61
30	90.93	
		16.83
32	77.57	
		14.27

Whitehouse Bay (IB11) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
34	65.27	11.91
36	54.04	9.36
38	38.29	6.12
40	23.52	3.52
42	12.32	1.64
44	4.72	0.48
46	0.69	0.03
47.24	0.00	

Whiskey Bay (IB12) Morphometry Summary.

Lake Area A (ha)	Lake Volume V (m^3x10^5)	Mean Depth $\bar{z}$ (m)	Maximum Depth Zm (m)
812.20	2162.00	26.62	67.97

Contour Depth (m)	Contour Area (ha)	Stratum Volume (m^3x10^5)
0	812.20	
		154.70
2	738.40	
		143.80
4	699.60	
		136.20
6	664.80	
		130.40
8	639.30	
		125.40
10	615.80	
		121.00
12	594.80	
		116.40
14	574.10	
		112.80
16	553.80	
		108.80
18	533.90	
		103.80
20	502.60	
		97.28
22	470.40	
		90.94
24	439.20	
		84.81
26	409.10	
		78.90
28	380.10	
		73.20
30	352.20	
		67.71
32	325.20	
		62.43

Whiskey Bay (B12) Morphometry Summary (cont'd).

Contour Depth (m)	Contour Area (ha)	Stratum Volume ($m^3 x 10^5$)
34	299.30	57.37
36	274.60	52.03
38	243.90	45.60
40	212.40	39.52
42	183.20	33.80
44	156.00	28.67
46	131.10	23.90
48	108.30	19.56
50	87.69	15.66
52	69.26	12.19
54	53.00	9.16
56	38.91	6.55
58	26.99	4.39
60	17.25	2.66
62	9.68	1.36
64	4.28	0.497
66	1.05	0.069
67.97	0.00	